Before the COPYRIGHT ROYALTY BOARD LIBRARY OF CONGRESS Washington, D.C.

In the Matter of:

The Digital Performance Right | Docket No. in Sound Recordings and Ephemeral Recordings

· | 2005-1 CRB DTRA

(Webcasting Rate Adjustment Proceeding)

Volume 36

Room LM-414 Library of Congress First Street and Independence Avenue, S.E. Washington, D.C. 20540

Tuesday, November 7, 2006

The above-entitled matter came on for hearing, pursuant to notice, at 9:30 a.m.

BEFORE:

THE HONORABLE JAMES SLEDGE, Chief Judge THE HONORABLE WILLIAM J. ROBERTS, JR., Judge THE HONORABLE STAN WISNIEWSKI, Judge

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	Page 6		Page 8
	I-N-D-E-X	1	A I am a principal with Deloitte
1	WITNESS EXAMINATION	2	Financial Advisory Services. And I lead the
1	DON FANCHER Direct las Mr. Straigthale 7	3	forensics practice for our firm in the U.S.
	Direct by Mr. Steinthal: 7 Cross by Mr. Smith: 51	4	Q And can you just remind the panel
	Cross by Ivii. Billiui.	5	what it was you were tasked with doing at the
	ROGER JAMES NEBEL	6	outset of this case before the direct phase of
	Direct by Mr. Larson: 100	7	the hearing?
	Cross by Mr. Astle: 151	8	A Yes, sir. I was tasked to provide
	Cross by Mr. Cowie: 157 Redirect by Mr. Larson: 211	9	some analysis and testimony around what a
	Recross by Mr. Cowie: 221	10	reasonable base would be from which to a
	Further redirect by Mr. Larson: 226	11	revenue base from which to apply royalty rates
	•	12	in a statutory licensing hearing such as this.
		13	
	EXHIBIT MARKED RECEIVED	1	
	Services Rebuttal Number R-1 36	14	development of DiMA's fee model associated
	SoundExchange	15	with the case?
	-	16	A No, sir, I did not.
	Number SX-144 58	17	Q Now, in connection with your
	Number SX-145 66	18	rebuttal testimony that was submitted, can you
	Number SX-146 157 165 Number SX-147 165 167	19	tell the panel what it was that you sought to
	Number SX-148 181	20	address?
	Number SX-149 190	21	A Primarily a couple of things based
1	Number SX-150 201	22	upon the testimony and the cross-examination
\vdash		 	D 0
1	Page 7 P-R-O-C-E-E-D-I-N-G-S	1	Page 9 from the earlier hearing, looking at a couple
2	(9:35 a.m.)	2	of issues that were brought by opposing
3	CHIEF JUDGE SLEDGE: We will come	3	counsel, one around some issues of the revenue
4	to order.	4	models and the process by which the webcasters
5	MR, STEINTHAL: DiMA calls Mr.	5	earn revenues from these webcasting types of
1 _		6	services.
6	Fancher, Your Honor.	1	
7	CHIEF JUDGE SLEDGE: Mr. Fancher,	7	So I did some additional analysis
8	will you raise your right hand, please?	8	around that and also to go back and look at
9	Whereupon,	9	some of the hypothetical situations that
10	DON FANCHER	10	opposing counsel had presented to me during my
11	was called as a witness by counsel for DiMA	11	testimony to assess those a little more
12	and, having been first duly sworn, was	12	completely than I was able to do during the
13	examined and testified as follows:	13	testimony.
14	CHIEF JUDGE SLEDGE: Thank you.	14	Q In section 2 of your written
15	Please be seated.	15	testimony, starting on page 2, you look at
16	MR. STEINTHAL: Good morning, Mr.	16	certain information about AOL's and Yahoo!'s
17	Fancher.	17	radio or music traffic and radio or music
18	THE WITNESS: Good morning.	18	revenues as compared to total traffic and
19	DIRECT EXAMINATION	19	total revenues. Can you tell the panel why it
20	BY MR. STEINTHAL:	20	was that you did that?
21	Q Can you briefly remind the panel	21	A Well, again, during the
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22	what your employment is?	22	hypotheticals and some of the

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cross-examination, opposing counsel was 1 2 presenting, I believe, a theory or a series of 3 theories around those hypotheticals that might 4 indicate value would be achieved, the overall 5 portal, through the access by users of the 6 music or radio sites, in essence, trying to 7 show that the webcasters would have been 8 willing to reduce or, in fact, not take any 9 revenues from advertising or other 10 fee-based-type services or those radio -- for 11 the radio usage purely because the radio usage 12 might generate traffic to other parts of the 13 portal.

So that was one of the reasons to look at the page views and information around where users are, in fact, going when they go to the portals of Yahoo! and AOL, also to look at the revenues to see just how much revenue is being generated by the radio Web sites, as opposed to the overall organization and how much value is driven there by the usage.

And what did looking at that data

They are not profitable at this point in time. And it would stand to reason that the webcasters would, in fact, seek to drive more

4 revenues and more profits through those 5 portals to make them more valuable to the

6 overall organization. 7

Now, you turn in your rebuttal testimony to the hypotheticals or a series of hypotheticals that were posed to you during your direct testimony, some of which related to hypothetical circumstances, where there was no revenue or de minimis revenue being derived by the webcaster in the hypotheticals that you were presented with.

Let me ask you this question. Is it your testimony that there should be no royalty or a de minimis royalty in the circumstances where the hypothetical situation is that there is no revenue or just a de minimis amount of revenue being derived by the webcaster?

A No, sir, that's not my testimony.

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tell you?

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Well, in general it told us that the usage is very small for the radio Web sites and the music Web sites, as opposed to the overall portal that Yahoo! and AOL both have. So the usage is small compared to the total.

That's an indication that there doesn't appear to be at least a significant amount of traffic being driven from the radio sites to other parts of the portal. While there may be some of that, there's equally or more probably coming the other way from other parts of the sites to the music sites.

So that indicates that the radio is not, in fact, driving people to other parts of the portal. And, therefore, you can't assume that value is being driven in that way.

Secondly, in looking at the revenues of the radio sites and the music sites, they are very small as compared to the total. And, in fact, they are losing money.

Q What is your testimony on that subject?

Well, if the webcasters have chosen not to monetize the specific traffic that is going to that site because they are not pursuing the ad revenues or some other form of revenue from which a base can be calculated, there is still obviously streaming of music. And then, therefore, a dollar amount needs to be paid on that relative to the license.

So in those situations, it would stand to reason that one could go to an alternative, which would be a usage metric for those particular situations.

And is it your understanding that DiMA's proposal is that there is a usage-based alternative fee?

Yes, sir, that is my A understanding.

CHIEF JUDGE SLEDGE: Mr. Steinthal, was that last question in the

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context that the rate is a lesser of?

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MR. STEINTHAL: Your Honor, the DiMA proposal --

CHIEF JUDGE SLEDGE: Focusing on a metric in a revenue, then if the revenue is lesser of, then it would be the royalty on the revenue?

MR. STEINTHAL: No, Your Honor. I think the point is that DiMA's proposal is that, like the prior statutory license scheme for subscription webcasting, where it is the option of the licensee to pay either a percentage of revenue or a per-usage fee on a ATH basis.

What the witness has said and what our proposal is is that in situations where there is no monetary base, you wouldn't pay zero. You would pay -- you would lose the option to pay on a revenue-based royalty if there's no revenue associated with that type of a -- that type of service.

So that Mr. Roback I think

CHIEF JUDGE SLEDGE: Thank you. BY MR. STEINTHAL:

Let's turn to the hypotheticals, Mr. Fancher. And, for the benefit of the panel, why don't we pass out the scenarios that were marked during Mr. Fancher's cross-examination on his direct.

MR. STEINTHAL: These documents were previously marked as SoundExchange trial exhibits 50, 51, 52, 53, 54, and 55. I'm not going to put them in evidence. I'm just using them for identification purposes, Your Honor.

· BY MR. STEINTHAL:

I think you start in paragraph 13 on page 5 of your written rebuttal testimony dealing with the hypothetical scenarios that were posed to you. And the scenario number one is a scenario where the multimedia webcaster provides 150 channels of music on its Web site but sells no advertising and receives no subscription fees, seeking, instead, to earn revenues by driving

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testified to that with respect to the bundled services, where you can't unbundle the proposal as we pay on the usage-based metric and not based on any kind of allocation of revenues where you can't legitimately unbundle.

And Mr. Fancher testified previously as well that where you can't unbundle, the concept would be to have some usage-based metric upon which to pay.

We have never proposed that you pay zero or near zero. It's just that the webcaster would lose the option with respect to paying on a revenue base if there was evidence that they were not monetizing.

I know that is a word you don't like. Everyone seems to use it. That doesn't 18 make it right, but in a situation where the webcaster doesn't make an effort to monetize, our proposal is simply that you lose that option you have to pay on the usage-based 22 metric.

additional traffic to other aspects of the multimedia companies' Web site offerings.

Can I ask you, sir, upon reflection, with respect to this particular hypothetical how you respond to how that situation would be covered in terms of fee payment?

Well, as we were just discussing with Your Honors, the -- first of all, I'm not aware of a webcaster that does this. This particular hypothetical is not one that I am aware of based on my conversations and my review.

However, if a webcaster were to pursue this, there would be no revenue base. Therefore, you could not apply a royalty rate to that.

But, as I have testified just a little while ago and before, that doesn't mean there would be no licensing fee paid on this usage. That is when you would then default to a usage-based metric, average tuning --

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aggregate tuning hours or something of that nature, as DiMA has proposed. So we won't use monetized since you don't like that.

But if the webcaster is not seeking in this particular effort to drive additional revenues, they are using it for some other purpose, that doesn't mean there is no value. And, therefore, you would default to that usage-based metric.

Scenario number two that was posed to you: multimedia webcaster provides 150 channels of music on its Web site but intentionally limits the amount of advertising to one advertisement per hour and receives no subscription fees, again seeking to earn revenues by driving additional traffic to other aspects of the multimedia companies' Web site offerings.

What is your reaction to how that 20 should be treated from a royalty-based 21 standpoint?

A Again, it's similar to

side has the same product or substantially the same product that doesn't sell advertising in a member-supported version.

How does that contrast to hypothetical number two?

A Well, in that situation, you do, in fact, have some sort of a process by which you can determine an aggregate amount that could be applied; in essence, try to look at what is happening in another situation that is very similar and then apply the revenues associated with that on a per-user basis to the service in this case that doesn't have the revenues being generated.

But I believe in this particular situation, there is no service with subscription fees. And so I am not sure that it would apply here specifically.

Q So, then, in the situation where you have a side-by-side non-subscription and subscription, you could import the revenue per hour from the non-subscription offering to the

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hypothetical number one, although you may have some minimal amounts of revenue that would be associated if, in fact, the webcaster is looking to purely limit the amount of revenue driven from advertising.

But if it's not a reasonable effort to generate revenues, you would again default back to this usage metric because there's not enough revenue being driven off of this particular activity to accommodate for full value.

12 Q Contrast, if you would, this
13 hypothetical to a situation like AOL had, at
14 least before it switched over to a
15 subscription model where they are actually
16 selling advertising in their subscription
17 product.

I think you testified in your direct examination about what you could do with respect to an AOL where with respect to a non-subscription offering it sells advertising in its product and when it side by

subscription offering?

A You could do that, yes. If you had similar or relatively similar types of products, you could apportion one to the other based upon the usage.

Q Now, scenario number three or hypothetical number three that you were asked about, which is SoundExchange trial exhibit 52, poses the hypothetical of a multimedia webcaster provides 150 channels of music on its Web site, receives no subscription fees, and uses all of the advertising spots to sell other products that the multimedia webcaster offers, such as other services on its Web site. How would you treat that?

A Well, again, this is another situation that I'm not aware of it existing, but as the hypothetical is presented, it comes into a situation of whether or not the advertising could be sold or could not be sold. We do have to look at relative values here.

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And if the webcaster is seeking to try to sell advertising revenue but nobody is buying the revenue, then that is a situation where perhaps there is no revenue and, therefore, no value associated with the webcasting. That, in fact, might be a zero revenue base.

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8 But if the webcaster is just 9 simply again -- and I think the intent of this hypothetical was to show the webcaster again 10 11 trying to use radio to drive people and drive 12 revenues to other parts of its portal, if that's a choice that they're making, then 13 14 there's a couple of things you can do. One 15 item might be to say, let's look at the 16 revenue that they could be generating if they 17 chose to sell it in a free market system and 18 then apply that free market or that fair 19 market value to the radio or to the portal 20 advertising time and then apply that same 21 value to the advertising that is, in fact, being used solely within portal-to-portal type 22

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THE WITNESS: I believe that would 1 2 be a revenue base because that's indicative of 3 the value associated with the Web streaming of 4 music. If they pursued it and they had a 5 diligent good faith effort to pursue 6 advertising sales for the radio portal and 7 were just unable to do so, then that's a 8 different situation. That's a market-based 9 situation that is indicative of value. 10 JUDGE ROBERTS: And it doesn't matter how much their revenues generated are 11 12 from that one hour? As long as it's something 13 above zero, then that's the appropriate

THE WITNESS: I believe it could be. Yes, sir.

JUDGE ROBERTS: Could be or --THE WITNESS: Well, obviously the parties would negotiate, but if you're looking at a licensing situation in a statutory -- if there's a good faith effort to generate

22 revenues, then yes, that would be the revenue

Page 23

of situations. So you ascribe that value to it and then use that as your revenue base.

The other option if, in fact, it's purely a situation where they are just trying to drive revenue to other parts of their portal, then again it would default to a metric-based usage-type system.

Q Now, hypothetical number four --JUDGE ROBERTS: Mr. Steinthal, before you get to the --

MR. STEINTHAL: Yes?

JUDGE ROBERTS: -- bundled services hypotheticals, just a question for Mr. Fancher. Hypothetical number two with the selling of one advertisement per hour and no subscription fees, this hypothetical seems to assume that the webcaster is intentionally limiting the advertising to one per hour.

What about the situation where that is all that they could sell, they tried and all they could sell was one per hour? Is that the revenue base then?

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revenue to report?

MR. STEINTHAL: Okay. Any more, Judge?

JUDGE ROBERTS: No. MR. STEINTHAL: Okay.

JUDGE WISNIEWSKI: Actually, let me follow up. Sir, tell me again, why would that be the amount that should be paid?

9 THE WITNESS: By identifying a 10 revenue base and applying a royalty rate to 11 it, you are trying --12 JUDGE WISNIEWSKI: In Judge

JUDGE WISNIEWSKI: In Judge Roberts' version of the hypothetical.

THE WITNESS: Right. Yes. I understand. Yes, sir. In any type of a situation where you're using a royalty rate applied to a base, what you're trying to do is pay the licensor some relative portion of the overall value achieved by the licensee.

20 If in this situation the licensee 21 has attempted to drive revenues, they have a 22 marketing department, or they use outside

Page 26

sources, they have an inventory of advertising 2 that they had made available, and those 3

sources go out to the marketplace and provide

the opportunity for the market to buy those

5 ads but the market just says no, we don't

believe there's value to this webcasting 6

service, we don't believe it's valuable for us 7 to pay for the advertising any more than just 8

9 one ad per hour, for example, then the market

10 has put the value on that. And then that

11 becomes the base of the revenue, which then a

12 percentage goes back to the licensor.

13 JUDGE WISNIEWSKI: Okay. Well --14 THE WITNESS: And so it's

15 different in that situation than in a company 16 making a decision that we're not going to sell

17 the licensing -- I'm sorry -- the advertising

18 time, we're going to use it internally to try 19 to promote our other parts of the business.

20 JUDGE WISNIEWSKI: Thank you. I 21 was just trying to clarify because I thought

I -- now I hear you saying that you're getting

1 aware of a webcaster using this particular

> 2 revenue model, but following the hypothetical,

3 if you have a limited bundle such as this,

4 where in this case you have two different

5 products being offered bundled together, if

6 they are also both offered on an a la carte

7 basis and there is a fee or a value ascribed

8 to each of those on a stand-alone basis, then 9 you could apportion each of those individually

10 to the bundle that's paid as a whole based on

11 the percentage, in essence, and then apply the 12 appropriate percentage to the bundled price.

13 And then that becomes the base of the revenue.

So if you have 60 percent of that bundled price is associated with the value from the a la carte basis of the webcasting service, then you would apply that 60 percent to the total bundle paid. And then that forms the revenue base for determining a license.

What about a situation where each aspect of the bundle does not have a stand-alone price? What do you do then?

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at estimating the value of the webcasting service. Before I thought I heard you saying you were trying to get at the value of the underlying music that was provided.

THE WITNESS: Not at the music itself. No. sir.

> MR. STEINTHAL: Okay. All right. BY MR. STEINTHAL:

Mr. Fancher, hypothetical number four that you were asked about was a hypothetical in which the webcaster does not offer a stand-alone product, ad-supported, or subscription but, instead, offers 150 channels of programming solely as part of a bundled offering with one other product, such as e-mail storage for \$5.99 a month. And you address this on page 60 of your testimony.

If you could tell the panel how you would deal with that?

Yes, sir. In this situation, if you have a limited bundle like this, which, again, as I state in my testimony, I am not Page 29

If each bundled -- each part of the bundle doesn't have a stand-alone price or you have just so many pieces in the bundle that you really can't apportion the value, then I think in that situation, you would need to default to a usage-based metric.

Let me give you the following hypothetical. Suppose a service was sold on an a la carte basis to consumers for three dollars a month, a webcasting service, and separately the owner of that webcasting service through a third party or directly sold a bundle that included broadband internet access, e-mail storage, security provisions, and a laundry list of other items for 20 or 30 dollars a month.

Would it be appropriate in that circumstance to use the three-dollar stand-alone price as a surrogate value for the webcasting component of that broader bundle?

Using the full a la carte stand-alone value and apply it to anybody who

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acquires the bundle?

Q Yes. Would that be appropriate?

A No, sir, I don't think so.

Q Why not?

A Well, first of all, when you have someone that buys something on an a la carte basis, you know they want that product. They have said, "I am willing to pay for it. And I want it." Therefore, there's a value to the individual.

When someone buys a bundle, it's hard to determine; in fact, impossible to determine, on a case-by-case basis where that individual, that user, sees value. Some may see value in one part of the bundle. Others see value in another part.

To apply the three-dollar stand-alone, then, to that portion of a bundle that may or may not have value, in essence, causes the licensee to be paying on revenue that may or may not have anything to do with in this case the streaming of music.

asked. And we may have just covered this, but let me read you the hypothetical scenario you were posited on your direct phase of the case, cross-examination.

Suppose the multimedia webcaster offers a commercial-free subscription product of 150 high bit rate channels for \$3 a month, the multimedia webcaster offers a 50-channel low bit rate free webcasting service with advertising but elects to run only one advertisement per hour, seeking, instead, to earn revenues by driving additional traffic to other aspects of the multimedia companies' Web site offerings and the multimedia webcaster offers a bundled product that includes: A) the identical 150 high bit rate commercial-free product that is offered for \$3 a month; and, b) one other product that is otherwise available to the public for \$2 a month and sells the bundle for \$4 per month.

A Okay.

Q How would you react to that?

Page 31

So it's too hard to apportion that out and ascribe where the value is being driven from a customer perspective.

Q And if, for example, the data reflected in that bundle scenario that 90 percent of the users or 90 percent of the subscribers to the bundle never even used the webcasting service, how would that impact your testimony as you just gave it?

A Well, in that situation, the 90 percent that don't ever go there would never generate any revenue for the determining of a license. That's why you would fall bask on a usage-based metric because the ten percent who did go there would then be utilizing the service, the music would be streamed to them individually, and you would have a basis for which to determine the license that should be paid relative to the customers that are actually using the service.

Q Let's turn to hypothetical scenario number five, about which you were

different scenarios here presented within one hypothetical, all of which I think are already covered. And other hypotheticals are in the testimony. But you would basically split it out. The first portion, you have a subscription product with a subscription paid

Well, you basically have three

that would form a revenue base for those particular customers.

For those situations under number two where you have only one advertisement per hour because that is the election of the company as in the earlier hypothetical number two, I believe it was, you would default to a usage-based metric because the company is not seeking to drive as much revenue around those particular offerings as they otherwise possibly could.

And then for the third, it would be just like we spoke on a moment ago. You do -- in that situation of this hypothetical, you do have two clear offerings. They each have

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an a la carte value. And you just apportion the bundled price relative to the individual two prices of the bundles and apply those.

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4 On page 7 of your written rebuttal 5 testimony, in the last full paragraph before 6 hypothetical number 6, in the first sentence, 7 on this very subject of that kind of bundle, you say, "It is important to note that this form of unbundling of products or services can only be done when there are legitimate 10 stand-alone market values for each aspect of 11 12 the bundle." What do you mean by "legitimate stand-alone market values for each aspect of 13 14 the bundle"?

15 A That you can clearly identify a price or a fee that has been shown to be 16 17 valuable to the marketplace. In essence, customers have said on an a la carte basis, "I 18 19 ascribe value to that, am willing to pay for 20 it and use it" only when you have those 21 situations so that it's clear that each of the 22 pieces of the bundle has value in the

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1 People don't buy them, which is an indication
2 that there's no value associated with them.

Q Mr. Fancher, are you familiar with the fact that SoundExchange in the rebuttal phase put forward for the first time a proposed definition of revenue for purposes of this proceeding?

A Yes, sir.

Q Have you reviewed that definition?

A Yes, sir, I have.

Q Let me ask you to take a look at

MR. STEINTHAL: Do we have a number?

(Whereupon, the aforementioned document was marked for identification as Services Rebuttal Exhibit Number R-1.)
BY MR. STEINTHAL:

Q Let me show you the rebuttal

Page 35

marketplace. The value has a price associated with it.

And, therefore, we can use those as, in essence, denominators to apply to the whole or numerators, I guess it would be, to apply to the whole to get the percentage of the bundled price that could be apportioned to that particular service offering.

Q Hypothetically if a seller offered a service, whether it's the webcasting service or another item within a bundle, on a stand-alone basis for, say, \$5 but nobody ever bought it or the number of people in responding to the offering that actually purchased that product on a stand-alone basis was de minimis, would you view that as a legitimate stand-alone market value?

A No, I don't believe it would be because it's shown to have no value in the market. I mean, there's no doubt people offer services, goods to the marketplace. And some of them don't -- they're not successful.

statement of SoundExchange, which we have

marked as Services rebuttal exhibit 1 for identification.

MR. SMITH: Your Honor, if I might?

CHIEF JUDGE SLEDGE: Yes, sir?
MR. SMITH: I am going to object
to any questioning about this subject. It's
not included anywhere in Mr. Fancher's
rebuttal testimony. And we have had no notice
this exhibit was going to be discussed in the
hearing.

So, for those two reasons, I think they are not authorized to discuss this topic.

MR. STEINTHAL: If I may respond, Your Honor?

CHIEF JUDGE SLEDGE: Yes, sir?
MR. STEINTHAL: First of all,
SoundExchange can hardly claim surprise over
a document which is their own document, their

21 rebuttal statement submitted with the rebuttal

22 case.

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And, secondly, SoundExchange made the calculated decision not to put in any kind of proposed definition of revenue in the direct case. We have nothing to respond to in the rebuttal phase as to any proposed definition of revenue from SoundExchange.

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It seems rather artificial for Mr. Smith to stand and say, "We shouldn't have Mr. Fancher give testimony about a document that he could not have looked at prior to the beginning of the rebuttal phase of the case." We're simply trying to elicit from Mr. Fancher certain views about what SoundExchange now posits as an appropriate definition of revenue.

16 It would be putting blinders on 17 the panel and us and game the system if you were allowed to wait until the end, put in a 18 19 proposal on something like a definition of 20 revenue that they could have and should have 21 put in in the direct phase and then say, "Oh, 22 by the way, you can't have your expert that

Page 40 CHIEF JUDGE SLEDGE: That doesn't 1 2 sound right to me.

3 MR. SMITH: That is not my 4 understanding, Your Honor.

CHIEF JUDGE SLEDGE: Does anyone have the citation or reference from that court?

MR. SMITH: Your Honor, I believe what it says is on direct testimony --

10 CHIEF JUDGE SLEDGE: I am not sure 11 we can follow it based on memory. We want to 12 see a document. And my computer is not 13 allowing me into our drives that have been 14 accessed all until yesterday. So I can't look 15 at it.

MR. STEINTHAL: Your Honor, I could actually ask certain questions without reference to this document if that would solve the problem.

CHIEF JUDGE SLEDGE: Just a moment. I hope we'll fix it to get an answer on what your responsibilities are on exhibits.

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was called to propose your own definition of revenue react to certain aspects that are directly relevant to what this witness has been testifying about all along."

My proposal here is simply to ask him about two or three facets of the SoundExchange proposed definition of revenue and get his reaction to those facets of the proposed definition.

If we can't do this, the system then conspires to prevent you from getting testimony from the appropriate witnesses for no fault of our own because they never put this forward until the beginning of the rebuttal case.

CHIEF JUDGE SLEDGE: What does the trial order provide on the exchange of exhibits?

MR. STEINTHAL: That is no requirement to exchange exhibits on cross-examination, as opposed to a demonstrative.

Page 41

JUDGE ROBERTS: Do you have something in there, Mr. Taylor?

MR. TAYLOR: I have all of the orders. Unfortunately, I just don't have it indexed.

MR. STEINTHAL: Your Honor, I am happy to recast the question to avoid the problem.

CHIEF JUDGE SLEDGE: You are not going to refer to exhibit 1?

11 MR. STEINTHAL: I won't refer to 12 the exhibit. That's correct. 13

CHIEF JUDGE SLEDGE: All right. Without exhibit 1, then, Mr. Smith, what is your response to the response?

MR. SMITH: The second problem persists, which is that we have no disclosure of this testimony in writing. If Mr.

19 Steinthal now comes in and talks about gaming

20 assistance, there was every explicit

21 authorization in the regulation for us to 22 amend our proposal when we did.

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If he thought he needed to respond to that, the least he could have done would have been to amend Mr. Fancher's testimony in advance or give us some other notice that he intended to give the testimony and what it would be because the essence of the system is when I come in to cross-examine this witness, I should have seen in writing what he is going to testify. And they made a deliberate decision not to tell us that.

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MR. STEINTHAL: Your Honor, that is not true. We didn't make a deliberate decision.

CHIEF JUDGE SLEDGE: You are just arguing that.

MR. STEINTHAL: I could give you a proffer of the questions I would ask. And then you can evaluate it on that basis if you would like, Your Honor.

CHIEF JUDGE SLEDGE: If I sustain the objection, then you will be free to do that.

We will take a short recess.

(Whereupon, the foregoing matter went off the record at 10:12 a.m. and went back on the record at 10:23 a.m.)

CHIEF JUDGE SLEDGE: Thank you. We will come to order. The question and the objection raise a problematic point because it is a difficult ruling to make. Judges are supposed to have easy rulings to make, not difficult rulings to make.

But given the arguments we have heard and comparing with what we see in the regulations, the objection is sustained. Mr. Steinthal, you are free to proceed with your proffer.

MR. STEINTHAL: Let me react this way. Your Honor. First, if I could ask the panel as to the basis for the decision so I can address it? For example, I don't know whether it's because we haven't put in an amended written statement beforehand. There haven't been 15 days since the close of the

The regulations permit amendments to the written statements 15 days after close of discovery, 351.2(c), amended written direct statements. Let's see. That doesn't apply to rebuttal statements.

I thought it did. I thought that was one of the amendments we made when we did it, but I don't see it. I thought sure we

added rebuttal. I think we had it correct. MR. STEINTHAL: Your Honor, I do have the trial order if it would help as well.

CHIEF JUDGE SLEDGE: I think that would only be relevant now if you want to use 14 exhibit 1.

MR. STEINTHAL: And I am happy not to, but I will point out that the trial order

17 18 CHIEF JUDGE SLEDGE: I don't think 19 it's important --

MR. STEINTHAL: Okay.

21 CHIEF JUDGE SLEDGE: -- if you're not going to refer to exhibit 1.

Page 43

Page 45 discovery period. We're basically here in the middle of the discovery period, when we're still getting documents.

So to the extent that the Board's ruling relates to the failure to provide a written amended statement that addresses the written rebuttal statement of the experts for SoundExchange that put in their proposed definition of revenue, it would be important for us to know whether that was an element of the Board's determination that we shouldn't be able to probe the SoundExchange written proposal.

So that's one issue if you can find a way to tell me what the basis is so we can deal with it.

CHIEF JUDGE SLEDGE: You are entitled to that. And I feel comfortable in saving that the absence of an amended rebuttal statement is an element that was considered.

MR. STEINTHAL: That we feel constricts us as the first ones out in this

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phase because we're still literally in the discovery phase, as Your Honors know. You're just issuing orders on some of the motions right now. So I believe we're in a difficult 5 situation.

I think I can cure the problem by asking a certain question, see if Mr. Smith objects, and what the panel does with it, rather than, you know, prolong the objection process and the like. So let me pose this question and see whether there's an objection to it.

BY MR. STEINTHAL:

13 14 Mr. Fancher, have you considered in the drafting of your original proposed 15 16 definition of revenue where at various points 17 you used the word "directly" attributable 18 revenue in relation to what should come into the revenue base? Have you considered whether 19 20 it would be appropriate instead to have a 21 definition of revenue that said anything 22 directly or indirectly related to a webcasting

Page 48

reference to the statement. MR. STEINTHAL: Well, in his

3 written -- I actually asked him at the 4 beginning of his testimony just to remind us what he was tasked with doing in his direct

5 report. And he testified that it was to 6 7

create a definition of revenue for purposes of 8 the proceeding in terms of a revenue base.

And in paragraph 1 of his rebuttal testimony, he says, "I was asked to analyze the appropriate base of revenues on which a reasonable royalty on revenues generated from internet radio products would be applied."

And I'm simply asking him whether in connection with that consideration he considered in deciding on the use of the phrase "directly attributable revenue," whether a phrase such as "directly or indirectly attributable" would be something that he considered and if he rejected it and why he rejected it.

CHIEF JUDGE SLEDGE: Mr. Smith?

Page 47

service's utilization of sound recordings should come into the revenue base?

MR. SMITH: Objection, Your Honor. I believe it's equally precluded by the

Court's prior ruling it's not in the

6 statement.

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7 CHIEF JUDGE SLEDGE: Mr.

Steinthal?

MR. STEINTHAL: The definition of revenue is in his original statement and is referred to in his rebuttal statement as well.

12 The question is simply whether the witness has considered whether use of the word "directly"

13 14 attributable revenue in his original

15 definition compared to considering use of a

phrase, "directly or indirectly related," was 16

17 something he had considered and if so why he

18 determined in his proposed definition of 19 revenue to use the words "directly

20 attributable" and not "directly or

21 indirectly."

CHIEF JUDGE SLEDGE: Give us a

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MR. SMITH: There is nothing whatever in his rebuttal testimony addressing the proper scope of the definition of revenue. The sentence Mr. Steinthal referred the Board to is a description of what he was asked to do in the direct phase. It leads on to a description of his testimony in the direct phase.

Then when we get past the historical portion of it on page 1, there is literally nothing that talks about the definition of revenue. And so we had no indication in advance that he was going to talk about direct revenues versus indirect revenues. None of that is in here.

CHIEF JUDGE SLEDGE: This objection is overruled. The question may be answered.

BY MR. STEINTHAL:

Let me try to get it back to you after all of the colloquy. In arriving at your definition of revenue and, in particular,

Page 52 Page 50 BY MR. SMITH: 1 use of the phrase "directly attributable 2 0 I want to start with your analysis revenue" at one point or another in that 3 in your rebuttal testimony of the usage definition, did you consider whether patterns and the economics of AOL and Yahoo! 4 4 alternatively one could have or should have Can you tell me, first of all, did you derive 5 5 captured within the revenue base anything 6 any conclusions about the proper definition of 6 directly or indirectly related to a 7 revenue from this analysis? 7 webcaster's use of sound recordings? 8 Specific to the definition of 8 That was considered. Yes, sir. 9 9 O But what is your view as to revenue? 10 10 whether it is appropriate to include O Yes. I don't believe this directly 11 "indirectly attributable revenue"? 11 attributes to the definition of revenue, no, 12 Well, as I testified this past 12 13 summer in front of this panel and as I stated 13 sir. 14 Okay. Now, you used the word 14 in my original testimony as well, written 0 "Analysis" in the heading to section 2 of your 15 testimony, I believe that the term 15 testimony on page 2. Do you see that? 16 16 "indirectly" would be inappropriate because 17 Yes, sir. 17 the revenue base, in essence, should be very 18 identifiable and if there are other values, 18 Can you tell me, is it really fair 19 to call what you did in this section an 19 that the parties believe exist, you would 20 analysis or is it more really a report of 20 capture that in the rate, not in the base. 21 numbers that AOL and Yahoo! supplied you? 21 You're better off to have a 22 22 Well, there was some analysis of definitive base that everyone can agree to and Page 51 Page 53 can be accounted for through recordkeeping, 1 the information they supplied. They did not 1 2 2 financial information, and the like. And, just give us the pure data. We did have to 3 3 perform some calculations and review the therefore, direct revenues accomplish that. 4 You start throwing in indirect, 4 information. So I think "Analysis" is an 5 5 appropriate term. you create too much ambiguity and too many 6 What calculations did you perform? 6 questions that could be challenged between the Q 7 7 We performed calculations around parties. MR. STEINTHAL: I have no further 8 8 the percentages of different revenues, as you 9 see under point 7, "Premium Revenue" versus 9 questions, Your Honor. 10 CHIEF JUDGE SLEDGE: Mr. Taylor, 10 "Direct Advertising" versus "Run of Network Allocations." We also had to do some analysis any questions? 11 11 12 MR. TAYLOR: No, Your Honor. 12 around their profit and loss statements, 13 CHIEF JUDGE SLEDGE: Any from 13 creating -- for example, EBITDA was not given 14 to us directly around Yahoo! Music versus broadcasters? 14 total. We had to take some of the information 15 MR. ASTLE: No, Your Honor. 15 16 CHIEF JUDGE SLEDGE: Mr. Smith? 16 they gave us, take their operating losses, for

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things of that nature.

example, and add back in depreciation and the like to have apples to apples comparisons,

Okay. Now, you said a number of

times that you're not aware of any webcaster

who is attempting to not capture all the

Paul Smith.
THE WITNESS: Good morning, Mr.
Smith.

MR. SMITH: Thank you, Your Honor.

Good morning, Mr. Fancher. I am

22 CROSS-EXAMINATION

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Page 56 Page 54 Now, how about AOL? Did anybody revenue they could capture in order to 1 2 talk to you? I believe, in fact, that you increase listenership? 3 mentioned today the fact that they didn't 3 Not as it's relative to the 4 until very recently have advertising on their webcasting of music or the streaming of music 5 or rating practice. 5 subscription channels? 6 6 Right. And I wonder if you could Did I mention that? A Well, perhaps I misheard you. You 7 tell us, what kind of investigation did you do 7 8 are not aware of that? to determine whether or not there are 9 webcasters out there who are doing precisely Well, restate the -- I don't 10 10 that? recall us talking about that specifically, but 11 11 We had discussions with representatives from Yahoo! as well as from 12 Do you have an awareness of AOL 12 not running advertising on their subscription 13 AOL and then also, as I testified in earlier 13 14 -- my earlier -- the earlier hearing, 14 channels? 15 15 discussions with others of my partners and A You said Yahoo! a moment ago. 16 I meant to say AOL. If I said, 16 individuals in my firm that are active in this "Yahoo!," it was my mistake. 17 17 space. Let's start over then. You can Did you look at any other examples 18 18 Q 19 of webcasters, in particular? 19 ask the question again. 20 20 All right. We're talking AOL. None beyond the ones that we have Q already discussed, which I discussed in my 21 21 \mathbf{A} Okay. 22 previous testimony: Live365, Yahoo!, AOL. I 22 Q I'm sure I messed it up. Did you Page 55 Page 57 1 have any discussions with them about the fact 1 think that was pretty much it. 2 2 that until recently, they were not running In your discussions with Yahoo!, 3 did anybody talk about MusicMatch and whether 3 advertising on their subscription channels? or not they're running advertising on that 4 4 Yes, sir, we talked about that. 5 5 service that Yahoo! runs? And did they also talk to you 6 I would have to go back and look. 6 about the fact that they don't run advertising I don't recall. We discussed MusicMatch as 7 on their XM channels? 7 8 8 being one of the items that they offer. I A Yes, sir, I'm aware of that. 9 Now, one of the things that you don't recall specifically discussing 10 10 advertising revenues on MusicMatch versus other types of -- or other sites that they 11 trial testimony of Eric Ronning. Is that 11 12 12 right? have. 13 13

So sitting here today, you don't have any information about whether or not 14 Yahoo! was deliberately deciding not to run 15 16 advertising on that service? 17

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I think there's information that's been provided around that as far as revenues that are being driven by some of the different portals, but I don't -- it's not off the top of memory. I would have to go look at some documents.

reviewed for your rebuttal testimony was the

A Yes.

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And he's the ad rep guy for AOL and Yahoo!?

That's correct. Α

And do you recall seeing in there, in his testimony, a discussion of the fact that he urges both AOL and Yahoo! to limit the number of ads that they sell in order to bring in more listeners?

I don't recall specifically.

Page 60 Page 58 MR. SMITH: I'm handing out what 1 But not in the short --1 2 2 has been marked for identification as CHIEF JUDGE SLEDGE: I believe you 3 3 SoundExchange exhibit 144, Your Honors. were reading from 181 and not page 182. 4 (Whereupon, the 4 PARTICIPANT: No. Your Honor. I aforementioned document 5 5 believe it is 182. 6 was marked for 6 MR. SMITH: I believe I started on 7 identification as 7 182 and ended on the first line of 183, Your 8 8 SoundExchange Exhibit Honor. The way these condensed transcripts 9 9 work, it's a little confusing. Number SX-144.) 10 BY MR. SMITH: 10 CHIEF JUDGE SLEDGE: All right. I 11 This, Mr. Fancher, I will 11 was reading the page numbers being at the top 12 of the page, but the page numbers are at the 12 represent is the version of the testimony of 13 Mr. Ronning that was given to us as underlying 13 bottom of the page? 14 14 your testimony by Mr. Steinthal and his MR. SMITH: Yes, sir. 15 colleagues. I would ask, if you could, if you 15 CHIEF JUDGE SLEDGE: I see. Thank 16 could look over to page 182 of the document 16 you. 17 beginning on line 8. 17 BY MR. SMITH: 18 Do you see "Question: Have you 18 That struck you as lower, revenues 19 had conversations with your clients about 19 in the short run, right? 20 20 increasing the number of ads per hour? It may or it may. If 21 "Answer: We have had 21 Ronning/Lipset is able to go out and tell 22 conversations on occasion. It is consistently 22 advertisers the plan, the advertisers may or Page 59 Page 61 1 Ronning/Lipset's viewpoint when asked that 1 may not be willing to pay more at the time. 2 2 fewer spots and more people is the best But obviously the overall effort in 3 3 scenario. Ronning/Lipset is paid, as I understand, to 4 "Have you had conversations with 4 some degree based upon their success in 5 5 your clients about driving up the number of getting these ads and a percentage of that 6 listeners? 6 amount. 7 7 "Yes. We have asked them to They are incented, as the company pursue that as much as possible because we do 8 is incented, to maximize revenues driven off 9 believe that that is the more favorable of advertising. So the long-term effort here 10 10 outcome to bring more people into the is to maximize revenues, which would be to the 11 listening and to increase the value of the 11 benefit of everybody, including the webcasters 12 price on the market through more listeners"? 12 and the Recording Artist Association. 13 Does that refresh your 13 Now, switching topics, Mr. 14 14 recollection about whether Mr. Ronning Fancher, my understanding of your current 15 testimony is that under the DiMA rate 15 testified that he urges AOL and Yahoo! to limit the number of ads in order to increase 16 proposal, in a situation where the business 16 17 listenership? 17 model of the webcaster doesn't generate any revenue directly from webcasting, that DiMA is 18 Yes, sir. He is trying to 18 19 19 proposing that the usage-based fee apply. Is maximize the overall value, I believe, from ****120 20 that correct? what I read here, the advertising that is 21 21 offered and, therefore, increase the revenues A Not quite. 22 Tell me how I'm not understanding to the highest maximizable point.

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it.

A Well, it's a little too limited.

I think you have said that if the revenue is not generated, then we fall to a usage-based metric. That is true if the revenue is — if an effort is being made to utilize the services for something other than generating revenue; in essence, to go back to the term the panel doesn't really like but monetization.

If the companies at the webcasters are not seeking to drive revenue specifically from the webcasting services or you've got a bundled situation where it's just impossible to apportion, then yes, a usage-based metric would be the appropriate methodology.

Q Now, referring to the -CHIEF JUDGE SLEDGE: Let me
clarify that it is not a dislike or a like.
It's a question of whether "monetize" is a
word.

(Laughter.)

the discussion of these hypotheticals?

A I have lots of recollection around the discussions, but, to answer your question, it would be helpful to look specifically at the testimony so I could respond more appropriately.

Q Well, I would be happy to do that, Mr. Fancher, but before I do that, I would like to ask you, do you have a recollection of discussing the usage-based fee applying in lieu of revenue at all last time?

A I believe I did refer to a usage-based metric being one possibility, yes.

MR. SMITH: Excuse me just a moment, Your Honor.

(Pause.)

MR. SMITH: Your Honor, I do not have a million copies of this transcript because I hadn't anticipated Mr. Fancher not recollecting that, but could I read it along with him over there and we could do it that way?

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THE WITNESS: Oh, I'm sorry.
Okay. I understand. That helps a little bit.

Yes, sir. Thank you.

BY MR. SMITH:

Q Now, referring to the situation where the webcaster is deliberately not trying to create any revenue directly attributable to webcasting, such as in hypothetical one, --

A Right.

Q -- in that situation, you are currently saying that the usage-based fee would apply?

A Yes. The usage-based metric under a hypothetical one, as was presented under my earlier testimony, a usage-based metric would be applied there.

Q When you were presented with that hypothetical the last time, you didn't say that the usage-based fee would apply, did you?

A I would have to go back and look at my testimony.

Q You don't have any recollection of

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1 CHIEF JUDGE SLEDGE: Let's be
2 clear. He didn't say he didn't recollect it.
3 He said he couldn't answer your specific
4 question as to a specific answer in the
5 testimony. But he said he did recollect.
6 MR. SMITH: He did recollect, but

he didn't recollect using -- well -CHIEF JUDGE SLEDGE: A specific

answer to a question, right?

MR. SMITH: Perhaps the best thing to do is just let the testimony stand for

itself, Your Honor. It's in the trial record.

CHIEF JUDGE SLEDGE: All right.

BY MR. SMITH:

Q Now, have you had conversations with anybody about the DiMA rate proposal since your last testimony, in which you talked about the question of whether there would be a usage-based fee applied in situations like hypothetical one?

A I discussed briefly with counsel the fact that DiMA has, in fact, proposed such

Page 68 Page 66 1 today that the DiMA rate proposal requires a a usage-based metric. 2 When did you have that discussion? 2 usage-based fee in situations where there is 3 no revenue, did you examine this document? 3 It's been over the course of the 4 I have not looked at the document last couple of months. 5 5 MR. SMITH: I am going to hand out specifically. No. sir. 6 what has been marked as SoundExchange exhibit 6 So you can't tell us anywhere in this document where that part of the proposal 7 7 145. 8 (Whereupon, the 8 exists, can you? 9 9 aforementioned document No, sir, not without reading it to 10 10 was marked for see if it's in there. 11 identification as 11 Now, as I understand it, what 12 SoundExchange Exhibit 12 you're saving now is the DiMA proposal is 13 Number SX-145.) 13 where there is no revenue or where there is de BY MR. SMITH: 14 14 minimis revenue, then a usage-based fee may 15 Exhibit 145 is the DiMA rate kick in or it may not, correct? It depends on 15 proposal, correct, Mr. Fancher? whether they are trying to get revenue? 16 16 17 \mathbf{A} Yes, sir. 17 Say that again one more time. I'm trying to understand where you 18 And the very first sentence of it 18 19 says, "DiMA proposes that the board provide 19 came out on this ultimately. You drew a 20 the services with the following options under 20 distinction, did you not, between situations 21 the licenses: one, a per-performance fee of 21 in which the service is trying to sell ads and 22 \$.00025; two, a per-aggregate tuning hours fee 22 the situation where it is deliberately not Page 67 Page 69 of \$.0038 or 38 percent of revenue fee of 5.5 1 trying to sell ads? 2 2 percent of revenue directly associated with Right. A 3 the streaming service." 3 In the situations where they're 4 trying to sell ads, even if they're quite 4 Now, do you read that sentence as 5 giving the service the option of paying the 5 unsuccessful, they can use the revenue-based 6 cheapest of the three? 6 approach? 7 7 If they're making a full faith It does not clearly delineate who A would make such a decision, I don't believe, 8 8 effort to do so and there's no value ascribed 9 9 to that because the market is not willing to in that sentence. You don't understand, "provide the 10 10 pay for it, then in that situation, yes, they services with the following options" --11 could use a revenue base. 11 How do you understand that the 12 A Oh, I'm sorry. 12 13 system would work? Who is going to decide 13 Q -- as giving the service the whether or not they're making a good faith 14 option? 14 15 Well, I don't see a definition of 15 effort to sell ads or have decided not to sell 16 ads? 16 services. If you're telling me services are 17 the Webcasters --17 Well, that is indicative of any 18 18 licensing situation that the parties agree Q Yes, sir. 19 19 that they're going to do the best to abide by -- then yes, it appears that it 120 would give that option to the webcasters to 20 the agreement. And usually there's a lot of

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case.

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choose one of the three.

Now, in formulating your testimony

provisions to ensure that if that is not the

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Q And do you have a suggestion of how that is done in other situations?

A How what is done? How auditing is done or how --

- Q How the parties in a licensing relationship decide whether or not one of the parties is making a good faith effort to sell ads.
- A Well, typically it's often through a review of market effort, to see what happens within the market. Some of it is within the just the purview of the licensor, for example, to see the activity the licensee is engaging in, the revenues that are coming back to the licensor by virtue of the agreement and whether or not they feel that is reasonable from the activity they see in the marketplace.

In addition to that, most provisions or most licensing agreements have a provision that allow for an auditing process whereby certain records, documents, and information, as well as even interviews are whether or not they can come to some agreement in that regard.

- Q There was some use of the term "de minimis" in the questions and answers before. Let me ask you this. How would the rate proposal apply in a situation where a webcaster decided to sell two ads an hour?
- A In that type of a situation or any situation like this, I think some level of reasonableness does need to be applied, that the webcaster is seeking to maximize revenues. That's what we're trying to do here, is the webcaster is seeking to maximize their revenues.

And if so, then the revenue base is the appropriate methodology to use. But if it can be shown that the webcaster is not, in fact, trying to maximize revenues, then that's when you would default back to a usage-based metric.

Q Well, you said in your testimony that selling one an hour is not good enough,

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allowed to the licensor to, in essence, step into the shoes and review the information of the licensee and determine if they believe the reasonable efforts are being made and the proper royalties are being paid.

Q And the licensor's usual remedy short of litigation is to terminate the license at the end of its term, correct? If they think this particular licensee is not making a good faith effort, they stop licensing to that person, correct?

A That's one option. Yes, sir.

Q It's not an option we have available here, is it?

A In a statutory situation, no, sir, that would not be.

Q So short of that, the only way to resolve a dispute over whether or not a good faith effort is being made is to litigate it, correct?

A Litigate or negotiate or bring the parties together to discuss and determine

that in that situation, you default back to the usage-based metric.

A I was responding to the hypothetical.

Q Yes. And your answer was in the hypothetical two, if they sell one ad an hour, that's not enough, correct?

A Well, one ad an hour. If they have the ability to sell more, if they could have an inventory of selling three or four an hour, then one an hour would probably not be enough and not be a reasonable effort to maximize the revenues associated with webcasting.

Q But I assume that you believe that selling three or four an hour, which is what Yahoo! and AOL have done at times, is certainly sufficient?

A Under my understanding of the current business model, yes.

Q How about two?

A I think it would depend upon

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whether or not the availability is there to sell more and generate more revenues.

Q Let's assume it is.

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 \mathbf{A} If it is, then two may not be enough.

0 How about if there is actually availability to sell six?

Well, then you have to get to which -- going back to the Ronning testimony. At some point there's a diminishing level of returns because advertisers are not 12 necessarily going to pay as much perhaps for as many ads an hour if it drives down listenership. You have got to find the economic balance between listenership and ad time.

And, again, the webcasters are generally seeking to try to maximize the value, maximize the revenues associated with the webcasting. And, therefore, they're going to try to pick the best balance that

22 accomplishes that.

Page 75

Now, in a situation where the webcaster sells one ad an hour deliberately, they could sell more, they would pay on the usage-based metric. Is that right?

Yes, sir, I believe so. At least that's consistent with what I have testified earlier. Yes.

But a webcaster who is unable to sell any ads, despite what you call diligent effort, they would pay nothing, right?

As far as the base of the revenues, right. They would pay nothing because they made a diligent effort to try to sell. The market has said there is no value there. And, therefore, there would be no payment under that metric.

And that could go on indefinitely?

Well, it could go on indefinitely. The likelihood is, though, if there's no value there, most for-profit businesses are going to find a different way to do it or not do it at all. So there's going to cease the service.

Page 76 If they can't sell ad revenues and

1 2 cover their costs, they're not going to do 3 that indefinitely. Their shareholders won't 4 allow it.

Q Unless they decide that they need to have that service available to bring people to the portal?

A If that could be shown and there was evidence that, in fact, the radio brought people to the portal, other ads are generated and other revenues are generated, then perhaps there's some value ascribed to that.

And who would you present that 0 evidence to?

Present? I'm sorry. That doesn't \mathbf{A} make sense. I don't understand.

Well, your last answer was "If that could be shown and there was evidence that" that is why they were doing it, then that would be a different situation. Maybe they would keep going.

The parties that are involved in \mathbf{A}

Page 77

1 the license. If the parties involved in the 2 license get together or one or the other would show that, in fact, there was value there, 4 then perhaps the result would be different.

At this point based on what we have here, though, that doesn't appear to be the case.

Let me ask you about hypothetical six, which I don't believe you talked about today, that you talk about in your written testimony you talk about in court back in June.

That's the hypothetical where the webcaster sells a media player that does both video and audio for a one-time fee of \$100.

A Right.

And from then on, the consumer 0 gets to use that for free?

Gets to use the subscription of channels for free?

Yes, sir. Q

> A Right.

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And your answer in the rebuttal testimony is in that situation, if the media -- this is a quote, "If the media player was specifically designed to access the webcaster's music offering, it would be included in the revenue base." And you refer to part C of your definition. Do you see that?

\mathbf{A} Yes.

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Q But, in fact, if you look at part C of your definition, it says that if the player can be used for any other function not covered by the statutory license, then the revenue is not countered. Isn't that right?

I'll take your word for it. I would have to go back and look at the definition. I don't have it in front of me.

I'm happy to show it to you. Paragraph C, part C of your definition, is that the place that answers this question?

MR. STEINTHAL: Let's give the witness his original testimony, Your Honor.

Page 80 1 to adopt a narrow definition of revenue that

> 2 looks only at what you call direct revenue and

3 it also concludes that there are other

4 indirect revenues or benefits that come from

5 operating a webcasting service, the Board

should take the latter into account by raising 6 7 the percentage, by raising the rate, correct?

It will be one of the components that the Board would consider. There are certainly in a vacuum, if there are other values that the parties believe exist, then it would be beneficial to take that in the form of the rate, not the base.

And the reason for that is because in a willing buyer, willing seller situation, if the parties decided to go with the narrow definition of revenue, they would, in fact, take into account these other revenues, these other benefits in negotiating the rate, correct?

A Typically that has been the case in my experience, yes.

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BY MR. SMITH:

Have you got paragraph C in front of you, Mr. Fancher?

Yes, sir. A

And it says that "Such monies paid for the players shall not be counted 'unless such software or access device is required as a condition to access the eligible webcasting service and has no independent function other than to access the eligible webcasting service." Do you see that?

Yes, sir. A

So if it actually carries video as 0 well as audio, even if it's a requirement for the service and even if it's all you ever pay for the rest of your life, it's not going to be counted, correct?

I don't believe it would be counted relative to item C in the definition.

One final point on this indirect versus direct revenue, Mr. Fancher. Just so it's clear, you believe that if the Board were Page 81

1 MR. SMITH: If I could have a 2 moment, Your Honor?

(Pause.)

MR. SMITH: I have no further questions, Your Honor.

CHIEF JUDGE SLEDGE: Mr.

7 Steinthal?

> MR. STEINTHAL: No questions, Your Honor.

CHIEF JUDGE SLEDGE: Any further questions by NPR?

MR. TAYLOR: No, Your Honor.

CHIEF JUDGE SLEDGE: Mr. Fancher,

I have a question that was raised by Mr. 14

15 Smith's questions. As I heard your testimony,

16 you began by saying that if there is no

17 revenue or de minimis revenue, then you would

18 use the default of the usage-based metric. 19 And after giving that preliminary

20 statement in response to Mr. Steinthal's 21 questions, which was referring to page 2 of 22 your rebuttal testimony, then you began to

Page 84 Page 82 CHIEF JUDGE SLEDGE: Well, then 1 consider the hypotheticals. 2 how is your testimony in support of a 2 And then once you got into the 3 proposal? How should we use your testimony to 3 hypotheticals, then you raised for the first 4 fashion a rate with terms and conditions that 4 time. I believe, the issue of whether revenue 5 would apply to DiMA's proposal? 5 is used as a metric as a result of defining a 6 THE WITNESS: Well, Your Honor, if good faith effort to sell revenue. 6 7 it's not in the proposal and you chose to use 7 THE WITNESS: Yes, sir. my explanation, you might have to add to the CHIEF JUDGE SLEDGE: That appears 8 8 9 to me to be a conflict in what you have said 9 proposal, add additional language to the 10 proposal to make sure that that issue gets in your testimony. And I would like for you 10 11 covered. 11 to clarify that. 12 THE WITNESS: Well, let me see if 12 CHIEF JUDGE SLEDGE: Any other 13 I can explain it this way, Your Honor. I know 13 questions from the Bench? 14 (No response.) you will. So please jump in if I am not 14 15 answering your question. 15 CHIEF JUDGE SLEDGE: Any other 16 questions generated by the questions that I The intent in what I am testifying 16 17 about is that the parties would seek to 17 raised? maximize their revenues and that if there are 18 MR. SMITH: No, Your Honor. 18 19 CHIEF JUDGE SLEDGE: All right. 19 indications that they are not doing that, the 20 Thank you, sir. 20 recording industry should not be penalized for 21 THE WITNESS: Thank you. 21 their lack of efforts to maximize revenues. 22 (Whereupon, the witness was 22 However, if they are attempting to Page 83 Page 85 maximize revenues but the market sees no value 1 excused.) 1 2 CHIEF JUDGE SLEDGE: Let's take a 2 in that, that would be penalizing to the 3 3 webcasters by continuing to force a payment 15-minute recess. where they are not receiving any value if, in 4 (Whereupon, the foregoing matter 4 5 5 went off the record at 11:00 a.m. and went fact, that is the case. 6 6 back on the record at 11:19 a.m.) So I am just trying to make the 7 clarification relative to the hypotheticals, 7 CHIEF JUDGE SLEDGE: Thank you. which, as I've said, I don't believe exist at 8 We will come to order. 8 9 MR. STEINTHAL: Your Honor, a 9 this point. But if, in fact, there is an 10 effort to not maximize the revenues, then 10 couple of housekeeping things first. CHIEF JUDGE SLEDGE: Yes, sir? 11 11 absolutely there should be monies paid. 12 MR. STEINTHAL: In response to the 12 But if the effort is there and the 13 order on the motion with respect to the market has said there's no value, in my mind, 13 Microsoft witness statement, this may not come 14 that would be penalizing to the webcasters to 14 15 as a great surprise to you, but Microsoft is 15 continue to force a payment. CHIEF JUDGE SLEDGE: That analysis 16 withdrawing its witness statement, rather than 16 or review of good faith efforts is nowhere in 17 producing the documents, which is consistent 17 with the tenor of its original approach. So 18 the DiMA proposal, is it? 18 19 we have been instructed by Microsoft to inform 19 THE WITNESS: As I look at the 20 the Board that they are withdrawing its 20 proposal, I don't believe that specific 21 21 language is in there. But I haven't read witness statement. 22 CHIEF JUDGE SLEDGE: All right. through the whole proposal, no, sir.

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Now, some reference in that Microsoft statement was that they were no longer participating in the proceeding or something like that.

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MR. STEINTHAL: They are not a direct participant, Your Honor. They only were participating through DiMA. Certain companies actually filed a notice as a participant, including AOL and Yahoo! Microsoft never filed a specific notice of a corporate intent to participate, but it was participating as a witness through DiMA, which did file a notice of intent to participate.

CHIEF JUDGE SLEDGE: When I read that, I went back and looked at some. I did not look at notices to participate, but I went back and looked at some signature lines.

And it appears to me that you and your partners have appeared on behalf of Microsoft and filed appearances on their behalf. So it very well may be that they remain a party and remain represented in this

1 the course of it.

> 2 Technically I don't think Microsoft has been a "participant," in quotes, 3

4 in the proceeding directly. We will double 5 confirm that. I don't know what the

6 implications would be in any event. As

7 happened with some of the SoundExchange

8 witnesses the first time around, they chose to

withdraw their witness statement in lieu of 9

10 complying with the discovery that was ordered 11 associated with their witness statements. And

that's essentially what Microsoft has chosen 12

13 to do.

> Second bit of housekeeping, Your Honor. And it --

CHIEF JUDGE SLEDGE: And, just to follow that, I believe before the testimony began here, there was a series of motions right soon after we got established here to dismiss a number of parties who had failed to participate. And, as I recall, that has not yet happened in the context of what you have

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case through you. So that's an issue that I don't know the answer to but just --

MR. STEINTHAL: I think it is fair to say that we were representing them as a witness and as a participant through DiMA but not as a strict participant in the proceedings since they never filed a notice of intent to participate as such. I don't know what the implications of that --

CHIEF JUDGE SLEDGE: I'm just suggesting you look at that and see if, in fact, what you just said is correct --

MR. STEINTHAL: Right.

CHIEF JUDGE SLEDGE: -- or if, in fact, it may not be correct and that you represent them in this proceeding.

MR. STEINTHAL: Right. Again, not to parse it too carefully, we certainly represented them as a witness in the proceeding, no question about that. We certainly represented DiMA and whatever companies have participated through DiMA in Page 89

just suggested.

MR. STEINTHAL: I wouldn't think -- if my memory and information is correct there would be nothing to dismiss with respect to Microsoft because they never filed a notice of intent to participate.

7 If they did, I could see the merit 8 in dismissing that filing, but I don't believe 9 they did. I believe they are only here as a 10 witness through DiMA, not as a direct "participant," in quotes, you know, under the 11 12 process.

CHIEF JUDGE SLEDGE: Mr. Taylor, 14 do you want to add anything?

MR. TAYLOR: Yes, Your Honor. Just to clarify, that dismissal came for a failure to file a direct statement. And those parties had filed a notice to participate.

19 And those parties did not ultimately file a 20

direct statement. Therefore, they are 21 automatically dismissed under the past

22 precedent of the library.

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CHIEF JUDGE SLEDGE: I don't know that direct statement is any different than any other phase of the proceeding.

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MR. STEINTHAL: But it goes back to whether people filed a notice of intent to participate because I think as a housekeeping thing, what the Board wanted to do and the Copyright Office wanted to do was make sure that a whole bunch of people may have filed preemptive notices of intent to participate.

SoundExchange surely wanted to know who they were going to have to meet in terms of evidence. And, therefore, if you didn't file a direct case by a certain date or a state that you would file a direct case, then you are out.

So I don't believe Microsoft ever filed a notice of intent to participate.

19 CHIEF JUDGE SLEDGE: Thank you. 20 MR. STEINTHAL: The other

21 housekeeping issue, Your Honor, in the first

22 CARP, first Webcasting CARP, there was a date 1 either a percentage of revenue or a per-use

2 fee at their option similar to the structure

of the preexisting license but with the

3 4 numbers being five and a half percent and the

.003 I think it is or whatever it is per hour

6 formula at their option.

> We have addressed -- in the hypotheticals that have come up in response to that, we have made clear, I have made clear on behalf of DiMA, both in the direct phase and today, that we would not seek to have a zero royalty associated with any unbundling situations or situations where there was a failure to seek to generate revenue, which I think is the proper English way to say to non-monetize. But if one failed to generate revenues, then you would lose the option to pay at the percentage of revenue base. And you would have to pay on the basis of usage metric.

We're also considering some of these other hypotheticals to see whether there

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set by the panel by which the parties should submit their final fee proposals.

And the reason for that was because during the course of the proceeding, the direct and the rebuttal phases, there was a variety of evidence that came in. And the panel felt it would be good to have a definitive final version of what the proposal is.

Responding to Mr. Smith's comments this morning, you know, as I said after Mr. Fancher's testimony in the direct phase, we had come forward with a proposal for DiMA that was not -- you know, we didn't contemplate all the different hypotheticals that SoundExchange has come up with.

And we are happy to interlineate within the original proposal provisions to cover legitimate hypotheticals and that the bottom line proposal we had made at the beginning of the case is still the case now. It is a proposal that the Webcasters pay

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really needs to be specific provision made literally in what would be the regs because at

2 3 the end of the day, we've got a proceeding

4 that separates. Ultimately there is a much

5 longer document that has all of the

6 interstitial words that embody the rate and

7 provide for circumstances that might not be

8 specifically the normal situation for the 9

typical webcaster. 10

SoundExchange has filed -- they have modified their rate proposal, as you know. In their rebuttal case, they put in a modified rate proposal. We would intend also to put in a more fully fleshed out proposal to take care of some of the evidentiary issues that have come up with respect to these hypotheticals, not in any respect undermining

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18 or changing the core economics but dealing

19 with some of the hypothetical situations that 20 have come up so that if anybody has a concern

21 about what if, what if, we can make

22 provision for it.

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We could do that in any number of ways. Either we could all agree and you could order that there be a drop dead date by which the final proposals after considering all of the evidence, including the rebuttal evidence, go in so we know when we get to the point of the post-trial findings and you know when we go there what is the final proposal we're addressing or we could do it -- you know, we could file something as soon as Your Honors would like.

We still have the opportunity to file an amendment to the rebuttal statement of case within the 15 days post the close of discovery if that's the deadline you would like us to follow. We could do it either way.

And, you know, I just put that out there that in the first CARP, what happened was the panel said, "Let's let the rebuttal evidence come in. Let's have a date towards the end of rebuttal. Put in your final all bells and whistles proposals so we know what

gearing up towards the rebuttal -- I mean, the proposed findings. Everybody can know what the other side's final proposal is."

We're not proposing anything radically different. It's just what we would be proposing is to deal with some of these hypotheticals in the text of the actual proposal.

JUDGE ROBERTS: Mr. Smith, did not SoundExchange amend somewhat the proposal in the proposed findings in the last webcasting proceeding?

MR. SMITH: You may be stumping me on that one, Your Honor, not having been here at the time.

MR. STEINTHAL: They did, and we had a bit of back and forth on that. I raise that as housekeeping because I just think we all ought to be operating under a certain calendaring of that. We could wait.

I think that the panel would like to know. I mean, that's why I'm trying to be

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we're looking at."

So I ask this as a housekeeping matter. We're willing to comply with whatever deadlines you would like on that, including if the panel feels it would be better for us to address it in an amended rebuttal statement within the 15-day close of discovery period. We're happy to do that, too.

JUDGE ROBERTS: So this requires an amendment of the rule.

MR. STEINTHAL: An amendment of the rule?

JUDGE ROBERTS: Or a waiving of the rule because I believe our rules provide that you can change your proposal at any time up until the filing of the proposed findings of fact.

MR. STEINTHAL: I am willing to do it. That is what happened the last time, Judge Roberts. And the panel said, "Let's not wait until the actual submission. Let's have an earlier date so that we know as we are

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1 transparent here about we're not changing the

2 economics of the proposal, but we are going to

3 address some of these non-failure to generate

4 revenue situations and other situations so

5 that it's clear that we're not arguing that

6 there's a zero royalty in the hypothetical
7 scenarios that SoundExchange put out the

scenarios that SoundExchange put out there.
That was never our intention.

9 So I think it's just a question of 10 time-tabling, Your Honor, as to how you would 11 like us to proceed. We could wait, Judge 12 Roberts, as you say, until the filing of 13 proposed findings, but I think everybody would 14 be benefitted by some prior articulation of 15 what the final proposal is.

CHIEF JUDGE SLEDGE: Mr. Smith, do you have any further housekeeping matter?

you have any further housekeeping matter?

MR. SMITH: I was just standing
here in case I had some reason to respond to
this. I'm not really sure what the proposal
is, Your Honor. There is a rule that
addresses this that it has to be before the

Page 100 Page 98 **DIRECT EXAMINATION** 1 filing of proposed findings and conclusions. 2 BY MR. LARSON: It would seem to me that if there is going to 3 be some modification of the rule, maybe we 3 Could you please just spell your name for the record for the court reporter, 4 4 should try to stipulate to that. Perhaps we 5 5 please? could do that. I don't know. 6 6 MR. STEINTHAL: Why don't we try A Sure. Roger, R-o-g-e-r, James, 7 7 J-a-m-e-s, Nebel, N-e-b-e-l. to deal with it that way and then bring 8 8 Thank you. something to Your Honors? 9 9 MR. SMITH: We could obviously And could you start by telling us 10 agree to do it and not do it after a certain 10 your educational background? date if you wanted to, I suppose. 11 Sure. I have an undergraduate 11 12 CHIEF JUDGE SLEDGE: We are just 12 degree in engineering. And I have a graduate 13 listening. You all are choosing to talk to us 13 Master of Science in management. Okay. And where are you currently 14 if that's --14 15 (Laughter.) 15 employed? 16 MR. STEINTHAL: I will take 16 A I am currently employed at FTI 17 17 responsibility for that, Your Honor. It Consulting. 18 struck me as a housekeeping issue in light of 18 Q Okay. And can you tell us about 19 what was occurring today and if the panel saw 19 what kind of work you do at FTI? benefit in our, in essence, filing an interim, 20 Sure. I am the national practice 20 21 fully flushed-out proposal based on some of 21 leader for strategic information security for 22 the hypotheticals that had come up but not 22 FTI Consulting. I work in the technology Page 99 Page 101 based on everything we have had in rebuttal, 1 practice, which is part of forensic litigation 2 2 we would be happy to do that. But I guess we and consulting. 3 3 can just affirmatively decide one way or the Essentially I'm in the technology 4 other as to whether there is merit in doing 4 group. There are about 300 of us. And we 5 5 that. provide technology consulting to 6 Without further ado, since there 6 organizations. 7 is nothing we are asking you to rule on right 7 Okay. And what type of clients do 8 now, DiMA is calling Roger Nebel, Your Honor. 8 you personally work for? 9 9 And Mr. Larson will take him through his I work typically for high 10 examination. 10 technology companies, software companies, and CHIEF JUDGE SLEDGE: Mr. Nebel, 11 also in the payment card industry for 11 12 will you raise your right hand, please, sir? 12 merchants and processors and banks. Because 13 13 I do information security and because Whereupon, 14 information security is regulated in certain 14 ROGER JAMES NEBEL was called as a witness by counsel for DiMA 15 industries; for example, financial services, 15 and, having been first duly sworn, was 16 I do a lot of work for banks and credit unions 16 17 examined and testified as follows: 17 and financial processing companies. 18 18 Okay. And I believe either your CHIEF JUDGE SLEDGE: Thank you. 19 19 statement or your bio mentions that you do Please be seated. 20 technical due diligence? 20 MR. LARSON: Good morning, Mr. 21 Technical due diligence, yes. 21 Nebel. 22 THE WITNESS: Good morning. 22 Part of FTI Consulting is a group that does

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bankruptcy and restructuring and mergers andacquisitions. And through those processes,

3 often companies want to understand for a piece

of technology or for a company they are

5 acquiring or divesting or doing some other

6 kind of financial transaction. They will ask

7 a technology expert, like myself and other

8 members of our staff, to come in and evaluate

9 that company, evaluate the technology,

evaluate the software, and to make somestatement about the technology itself, is it

12 reasonable, does it work, that sort of thing.

Q Now, your statement also mentions that you do the developing, testing, and implementing complex computer systems? Could you just expand on that for us?

A Sure. That's more related to overall my experience. So if you don't mind, we'll skip ahead a little bit in terms of --

Q Sure.

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A For 20 years, I worked as a contractor to the U.S. Department of Defense

Q You mentioned the internet. Does your work as a consultant involve working with companies who use the internet?

A It does. As I indicated, for the last ten years, I have been working strictly in the commercial world. And that period of time, the last decade, is when we have seen the internet go from what was a strictly government-funded and government-used piece of technology to almost exclusively commercial.

And so the work I do now in a number of areas focuses on the internet, the use of the internet as the backbone for transmitting financial information, the use of the internet as a source of data for doing research, and in the specific matter today the use of the internet for streaming audio.

18 Q Okay. Now, you mentioned a couple
19 of companies that you have worked for,
20 including Local Media Internet Ventures and
21 Movie Link.

22 A Sure.

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building systems. So we were contracted to develop large-scale software systems for intelligence command and control special operations, so complex systems that would process data, signal processing, censor data to try to make sense of it and turn around and

to try to make sense of it and turn around and produce it to effectively the war-fighter, the person driving the ship or the missile or that

9 sort of thing. 10 And the

And then about ten years ago, a colleague and I thought that the internet was probably going to be pretty big and security would be important. So we started a consulting company.

And for the last ten years, I have been doing essentially the same kind of work but in the commercial world, so for banks and financial institutions and that sort of thing. So I have developed, personally worked on developing, hundreds of applications. And I have probably audited and assessed thousands of applications.

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1 Q Could you tell us about -- let's 2 take the first one.

A Sure.

service to both of them.

Q What type of work did you do for Local Media Internet Ventures?

A Sure. LMIV was a venture-funded organization headquartered in Indianapolis. And this was eight or nine years ago. Essentially LMIV, Local Media Internet Ventures, the idea was to bring technology to the local radio market, so radio stations who couldn't afford to broadcast on the internet and then also to take that same technology and go to the labels and to the people who sell, produce, and distribute music and to offer a

The idea was you would buy some technology from LMIV. The radio station would. And you could broadcast their signal, broadcast their audio over the internet. And then you could as a consumer purchase a cell phone.

And then you could while a song was playing or through the internet choose that song and say, "I want to buy it right now. I want to buy that album."

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So my work with LMIV consisted of doing what is called the risk assessment part of the process, what were the technical risks in this kind of venture, technical risks for hackers getting the music, using the system for other than it was intended to use, that sort of thing.

- Q Okay. And what about Movie Link?
- 12 13 Movie Link is a joint venture A 14 owned by a number of studies: Sony, Universal, Paramount. The membership has 15 changed over time, but that's essentially --16 17 essentially it's owned by the studios who 18 produce movies.

And Movie Link is a Web site you can go to: movielink.com. You can choose a movie. You can download it, pay for it, download it, and show a movie.

Page 108 that's sent over the internet? Is that what

- 1
- 2 you're saying?
- Over the internet is one 3 4 application of it. Digital rights management
- 5 is a way to put a sealed envelope around the
- 6 movie. And the only person -- actually, a
- 7 better way to say that, digital rights
- 8 management, DRM, is a way to put the movie in
- 9 a safe. And only the purchaser of the license
- 10 has the combo to open the safe.
- All right. You took us through 11
- 12 some of your work history, but let's fill in
- 13 · a few of the blanks. You mentioned True
- 14 Secure.

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- A Yes.
- This is the company you were with 16 Q
- 17 before FTI?
- 18 A Prior to coming to FTI, I was the Vice President of Services at True Secure. So 19
- 20 I managed all of the people who directly
- 21 delivered internet security services to
- 22 customers.

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And while I was at True Secure, we did two things for Movie Link. We provided them with their ongoing security assurance that the platform and infrastructure they used was secure, hackers couldn't get movies without paying for them.

And then we also were involved with assessing the digital rights management that they used for copy protection.

- And just tell us briefly, if you could, or in sort of layman's terms what you mean by "digital rights management"?
- A Digital rights management is the encryption technology and access control that's placed around in this case a movie at Movie Link so that only the purchaser of the movie is allowed to see it. And they can only play it or see it a limited number of times depending on the license they purchase. So it's applied crypto, applied encryption, technology.
 - So it's a method of securing data Q

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We had about 1,000 customers there. And I also launched the security consulting group there and built a product called Application Security Review, which is, in essence, an audit of a complex piece of software to do a specific job.

- Okay. And you mentioned before True Secure, you were at the company that was I-Defense?
- In I-Defense. I was the Chief A Technology Officer at I-Defense. And we built a commercial platform. We essentially built the Amazon of security vulnerability. So a customer could come and purchase from us information about security vulnerabilities; so, for example, antivirus or exploits in the Microsoft browser, that sort of thing.

So I was the lead. I was the Chief Technology Officer. I designed the system and led the building of it.

Okay. And just give us a sense of what that system did so we understand.

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Sure. It's a large-scale database of security vulnerability information. So a user could go -- we had people who would go out and find security vulnerabilities and then write a report on them. And then that report would go in the database. And then a user could come and subscribe and see the specific vulnerabilities that applied to the kind of technologies they were interested in, if they had a Microsoft desktop or a Linux server, an Oracle database, that sort of thing.

11 12 Turning your attention to 0 13 paragraph 3 of your statement, you said your 14 experience with the federal government, about 15 five or six lines down, included, among many 16 other aspects of modern computing and 17 networking technologies, digitizing of 18 communications, radar, sonar, and imagery for 19 transmission over networks; for example, the 20 internet and many descendants and forbearers 21 for it.

information in and say, "Ah. We last heard 1 2 that signature of that boat over in this area. 3 We now hear it over in this area." So the 4 boat has moved from here to here.

So we would digitize audio information like that and then transmit it over the network to the people who could then analyze what that meant.

So over the course of the work you have been describing, have you developed a familiarity with the way that music or other information is delivered to consumers over the internet?

 \mathbf{A} Yes, I have.

0 Can you explain?

Sure. In a couple of ways. I mentioned a project in there. In the Pacific theater of operations, there are 40-some bilateral treaties by which we, the United States, can share information with the Koreans, the Japanese, the Australians, that

21 22 sort of thing. And it's an issue because it

Page 111

O Can you just expand on that for us and tell us what experience you're referring to there?

A Sure. As I indicated earlier, I worked developing complex projects for intelligence command and control and special operations. And in that role, we would be asked to -- by a customer to build a system that would take, for example, acoustic information, audio, sound, from an array of microphones under the water, the SOSUS array.

So these microphones would listen for the signature in this case of a Soviet submarine, for example. The propeller going through the water makes a certain noise. And you can tell precisely which submarine it is by the noise.

So we would take that analog signal, digitize it, transmit it over the ARPA net, over the forbearer to the internet, and bring it into what's called a correlation infusion center. You would bring that

would require the user to have a system and a separate screen for each of those in order to

get the entire picture.

So we would solve quite a problem in that way if we could reduce all of that information into one place. So we built a project. I designed - the colleague and I that started the consulting business designed a project where we could bring all of those together on a Web server, on a Netscape Web server in this case, in that time frame in an 12 Oracle database, and then deliver that information directly. And, again, that included these audio recordings that we talked about.

And then in terms of the direct internet delivery of music, in the preparation of this testimony, I trialed all of the services that we are going to talk about.

20 And you spoke with people at the 21 various services as well. Is that correct?

I did. I did several things. I

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Uh-huh.

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downloaded each of AOL Radio, Yahoo! Launchcast, and Live365. They each have a different kind of player. In fact, some of 4 them have more than one kind of player 5 depending on your internet connection and your

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security.

popup blockers and that sort of thing. But I downloaded each of those services. I subscribed. I started a trial account and became a legitimate user on each of those and so learned how to use them,

11 learned how the technology works. 12 And then I interviewed an 13 engineering manager at each of those services 14 to get a sort of behind-the-scenes 15 understanding. As we talked about, I audit. 16 I build systems and I audit systems. So

essentially I carried out kind of the kind of 17 18 questions you would ask an engineering person

19 in an audit, "How did you design this? What 20 were your constraints? What technologies did

21 vou use? What were your trade-offs?"; that

22 sort of thing. I gained an in-depth

that you take. And so since 2001, I created 1 2 3 of the courses. I teach five of the six on 3 a regular basis. 4

Can you just tell us what those Q courses are?

A Sure. There's an introductory course: Introduction to Information Security Management. It's kind of a survey of the information security field, technology, policy issues, training sort of things.

There's a course on auditing 12 systems. There's a course on writing policy. There's a course on designing security 14 architecture. And there's a course on the threats and attack scenarios that are available. 16

O Okay. Now, I understand that you have some professional certifications as well?

I do. In my testimony, I talk about the certified information system auditor certification. I also have a certified information system security professional. And

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And I understand you are a professor as well?

understanding of these services.

I am. I am an adjunct at the University of Virginia in the Graduate Information Security Management Program.

Okay. And what is that program?

8 A This is a certificate program. You earn graduate credits. I have been

teaching there since 2001. You earn graduate 10

11 credits for taking a series of six courses,

12 for which you receive a certificate. And then

13 those courses, the credits apply towards a 14 Master's degree.

So most of the students are in, for example, the George Mason M.B.A. program or the George Washington Master of Science program or Mary Washington. They're in one of the other Virginia schools and they have decided to focus their Master's in information

So UVa offers these six courses

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I am also certified by Visa and MasterCard to conduct payment card industry audits.

And each of these professional certifications requires you to demonstrate time of the -- time, experience, a number of years of experience. You're required to get references from people, peers, that certify that yes, this individual has the experience.

You have to take an examination and pass it. You have continuing professional educational requirements every year, 40 years of continuing professional education.

And then you have to sign a code of ethics.

Okay. Mr. Nebel, have you previously qualified to testify as a expert witness on these topics?

I have previously been qualified to serve as an expert in internet, computer software security, yes.

And do you lecture on these Q topics?

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MR. LARSON: Your Honor, at this time I would offer Mr. Nebel as an expert on the technology and security of digital audio transmissions on the internet.

CHIEF JUDGE SLEDGE: Any objection?

MR. COWIE: No, Your Honor. CHIEF JUDGE SLEDGE: Without objection, the offer is accepted, granted.

MR. LARSON: Thank you, Your 12 Honor.

BY MR. LARSON:

14 Now, Mr. Nebel, you provide some fairly technical background in paragraphs 5 to 15 16 7 in your statement about how the internet 17 functions?

18 \mathbf{A} Uh-huh.

19 Q Without getting too much into the 20 weeds, I'm wondering if you can tell us in 21 basic terms, what are the internet protocols

22 that you mention? Page 120

2 protocols.

Would you like me to speak about any of them in specific or --

on the internet uses one or more of these

Yeah. I'll ask you a couple of follow-up questions.

> \mathbf{A} Okay. Sure. Sure.

In particular, in paragraph 6, you mentioned -- I believe you used the term "shortcomings," --

Yes. A

-- that there were some O shortcomings of streaming content over the internet. Can you tell us what these shortcomings are?

There are -- yes. There are several shortcomings, if you will, in streaming audio on the internet. The first has to do with the way the internet was designed. It was designed to push data packets around, for example, in e-mail.

And when I send an e-mail, it gets

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A I speak about some specific internet protocols there. And I provide the Wikipedia definition, which is available basically to anybody with internet access.

And I point out these specific protocols because without these protocols, the internet does not work. And without these protocols, you cannot stream an internet radio broadcast. You can't download a song from iTunes.

These protocols are fundamentally required. They're the lingua franca. They're the language we use so that you can ask me a question, I can understand it, I can respond to it, and everyone else in the room can understand the question and can understand the response.

So these protocols are fundamental to how things work. And I point out some specific ones. And each of these is used in some way by AOL Radio, Yahoo! Launchcast, and Live365. In fact, anybody that provides audio

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broken up into several chunks. And each of 1 2 these chunks can take a separate path. And by 3 the time they get to your e-mail server, 4 they're put back in the correct order and you 5 get a full e-mail.

And that process can take one to several minutes or days or hours, as we all know when we have tried to send an e-mail to somebody and "You didn't get it yet? You didn't get it yet?" So that process of composing it, splitting it apart, and putting it back together is sort of the fundamental design of the internet.

It was designed to do that so that if any node or any communications circuit failed, the message would still get through and find other paths. And that's completely acceptable in the case of an e-mail, for example, because you can wait for it to arrive. If it arrives five minutes from now, it's as good as if it arrived two minutes because you get the whole thing together.

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The issue in broadcasting sound and sending sound over the internet is that we as humans expect to hear the sound in sort of a continuous non-interrupted pattern.

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And so if I am speaking like this and then I — there's a gap, you will notice this gap. And it makes an unacceptable audio reproduction.

So the main shortcoming on the internet for streaming audio is how to keep a continuous stream of information so that the user's hearing experience, the audio experience, is acceptable.

And each of these protocols does one thing a little bit better than the others. So there's a trade-off. So, for example, the user datagram protocol minimizes the amount of overhead. So you can send a lot of pure audio content, but without the overhead, you lose error correction and packet regeneration. So that you would definitely get a gap in music

Q And in terms of a stream of music, what would be the impact of that decision?

A Well, the impact would be either you would have to lower the quality by reducing the amount of content or you would have to have a much faster channel; a much faster internet connection; and much bigger, faster servers in order to make up for that overhead.

10 O I see.

A So there are trade-offs.

12 Q In paragraph 7 on this same topic, 13 you discuss some technical and administrative 14 difficulties.

A Yes.

Q And, in particular, you mention bandwidth limitations.

A Yes.

Q Can you tell us how that relates to what we have been talking about?

Q And, again, it's related to what we were just talking about. The bandwidth

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So that's one example. Each of these have trade-offs.

if some bits or packets didn't get there.

Q And the services at issue in this proceeding of some of the services that you are familiar with use these particular protocols?

A Yes. And they use them each in a different way. So they each made trade-off decisions. For example, AOL Radio is a TCP connection, transmission control protocol.

So it is a very reliable protocol, very reliable connection, but it has a lot of overhead. So it limits the amount of data you can send through it because of all this overhead. It's as though when you asked a question, you needed to have an interpreter rephrase the question so I could understand it.

And then when I responded, I had an interpreter. And then they would send the answer back. That overhead means you can send less content per given unit of time. Page 125

limitation, bandwidth has to do with the speedof your connection. So the faster your

3 connection, the faster your internet

4 connection, the more data you can push through5 that pipe.

If you think of your connection to the internet as a pipe, a dial-up connection would be a very small pipe. And you can push only so much data through it. If you had a DSL connection or a cable modem, it's a bigger pipe. You can push more data through it.

So "bandwidth" is the term of art for the size of your pipe essentially, how much data you can push through the pipe. And bandwidth is probably one of the largest constraints on streaming internet audio. The smaller the pipe, the less data you can push, the lower the quality. The larger the pipe, the more data, the higher the quality.

Q Okay. And you mentioned also that there were some other implications of bandwidth limitations, dropouts, clicks,

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buzzes? Do you see that there?

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Yeah. Actually -- yes. The audio - so what I'm talking about there is the impact on the audio experience. So under limited bandwidth, you drop packets. You lose streaming data. And you end up hearing that as dropouts and fade-outs and that sort of thing.

And then we're going to talk about this later, but if you pick up noise on the circuit, then you would hear buzzes and clicks and that sort of thing.

So those are all bandwidth constraints. They are bandwidth issues. Because you have less of a pipe to push the data, you end up with distortion and noise. And that's at least pops and clicks and buzzes.

19 Now we're going to talk in some 20 more detail in a few minutes about 21 streamripping.

> Uh-huh. \mathbf{A}

> > Page 127

But these effects that you were just talking about, would those affect the streamripping experience?

Well, when you go to make a -well, when you're listening to it, you can hear the pops and clicks, buzzes, dropouts. You can hear the lower audio quality for a number of reasons.

But when you go to make a copy using, for example, streamripping software, then you are going to make a digital copy of exactly what you're receiving, what you hear. And you will make a copy of the dropouts, the buzzes, the clicks, the pops.

Streamripping does not provide --it doesn't -- it can't put content back in where it isn't there.

Let's move along to paragraph 8 of your statement. And I want to just go straight to the bottom line, as they say. At the bottom of the paragraph, you say, "The bottom line is that the analog to digital

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version and encoding inevitably involves 1 2 measurable loss due to the resolution of the 3 converter, quantization, dithering, clipping, 4 and signal-to-noise ratio."

Uh-huh.

Q Let's just see if we can unpack that a little bit to --

Sure. The original analog sound is a pressure wave that your ear reproduces. And there is a wide dynamic range that your ear is able to pick up.

When you convert that essentially analog event to digital, there are a number of trade-offs and losses that are going to occur. And so I talk here in order of some of the kind of losses that are going to occur. First is in the analog to digital converter.

The analog to digital converter is going to take what is an analog pressure wave, which operates on a continuous basis. And it's going to digitize it. It's going to say that as I am speaking in this loud of a voice

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at this frequency, that is equal to some 2 number and, in fact, a whole integer. And it can only have a certain range, typically 16 4 bits.

So there are roughly 32,000 some odd digital representations. And we know that the human voice, for example, has a very wide range, much larger than 32,000 frequencies; and musical instruments.

And then the interaction of those harmonics and that sort of thing mean that when you do the process of analog to digital conversion, you are giving up some quality because there are only whole numbers used to represent what is, in fact, a very wide range of values.

And, again, in layman's terms, what we're talking about here is basically recording the CD or recording the --

20 A Recording the original music, 21 correct.

> Q All right. So let's assume we

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have the CD created.

- A Uh-huh.
- Q Tell me about what encoding is.

A Then the next -- now you've gotten the song recorded. And say it's on a CD. In order to make it palatable for the stream services, that data has got to move from the CD size of the file.

It's a very large file at this point. If anybody has ever seen a CD, it's a very large file. The music files are very large. So in order to stream it, you have to somehow reduce that data to be able to send it down these limited bandwidth pipes that we talked about.

So the first thing you do is this encoding, coding or encoding, to put it into a form that is going to be small enough that you can send over a channel.

- Q What's the impact of that process 21 on the audio quality?
- 22 A The impact is that you are going

Q Just explain again what is the bit rate conversion that you use essentially?

A Yeah. The webcaster, the streamer has to make some trade-off decisions. How much bandwidth are they willing to buy? How much bandwidth does the end listener of the music have available to them? And so, therefore, how big of a file are they willing to try to send?

More bandwidth, you can push more data. You can have a bigger file. So you lose less fidelity. Smaller pipe, smaller bandwidth, smaller file, you lose more fidelity when you prepare the file to be sent over the stream.

Q Now, we have been talking somewhat on a theoretical level. You also mentioned, though, that you examined the services?

19 A I did. At issue, I did.

20 Q And those were AOL, Yahoo!, and 21 Live365?

A AOL Radio, Yahooo! Launchcast, and

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to compress the data. And you are going to lose some resolution. The encoding to be able to stream it is a loss in compression. You're going to compress it to make it small enough, and you're going to lose some resolution.

So we've gone from the analog signal, which had this infinite resolution, to a digital signal, which has got, say, 32,000 different values. And now we're going to compress it yet again. And so we're going to lose some measure of value. We're going to lose signal.

Q So at the end of this process, just so I understand, what we have essentially got, then, is a digital file sitting on the webcaster's server ready to --

A Well, it's not quite ready. Now you have to then put it into the bit rate format. So then there is another conversion to put it into this file that's ready to be served up to -- so there's another loss involved with that.

1 Live365. That's correct.

Q And I think you said before that those services use the types of communication protocols that you were --

A They each in a slightly different way use the communications protocols we talked about earlier. AOL Radio, for example, was a peer TCP Web connection. So, in other words, it was as though I had a browser and I connected to any Web site.

The practical implications of that is to use AOL Radio, I could simply use it at work. I launched AOL. I went to aol.com. I clicked on AOL Radio site. The player opened up. And I began listening to music.

To the corporate firewall, to the software in my system, it was as though a browser were connecting to a Web site. So it used the simplest method of connecting, the simplest, most straightforward.

Q And how about Yahoo!?

A Yahoo! Launchcast was a little

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more complicated. It uses a combination of protocols. And there are a couple of different players that you can choose. So depending on your corporate firewall, the security software on your local system, you could choose a TCP or UDP connection.

Again, remember, with the TCP connection, there was a lot of overhead. So you would lose fidelity to support the overhead. With UDP, there is no overhead, but there is no error correction. So if the pipe gets interrupted for a moment, you will have a noticeable audio dropout, so again that trade-off.

But with Yahoo! Launchcast, you could go either way.

- And when you actually used these services, did you experience these audio effects?
- A Yes, yes. There was discernible dropouts and clicks and buzzes, the typical kind of things in streaming broadcasts.

operated? And they did. They described it in very good detail.

I wanted to understand what kind of controls they put in place to be in compliance with the standards that they chose to be in compliance with. So I asked them questions about and they described to me the steps that they went through.

And these three services each did different things. So I can describe them or

- We don't need to probably get into 0 that level of detail.
 - A Okav. Sure.
- 15 Let me ask you this. You didn't actually attempt to determine whether these 16 17 services comply with all aspects of the DMCA, 18 correct?
 - No. That would be beyond the scope and beyond my ability. I'm not a lawyer. I'm a technologist.
 - Okay. But were there particular Q

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Now, you also mentioned in your testimony compliance with DMCA requirements?

A Uh-huh.

Q Just tell me what you did there.

Sure. As we mentioned earlier, I spoke with engineering managers at each of these services. And I approached this in the way that I would approach any assessment.

I was looking for, how does the service work and then what kind of controls, what kind of procedures did these services put in place to be in compliance with whatever set of standards that they decided to comply with. These could be engineering standards. They could be regulatory standards. They could be any kind of standard or regulation or statute, whatever.

So I wanted to speak with them about, well, first of all, how knowledgeable were they. Could they describe to me the service in technical terms the kind of connections, protocols, data, how they

requirements that you did focus on?

There were some specific ones. The first was, could you search for and find a song on demand? And they explained the controls that would prevent that.

The second was, did they have controls in place that would allow them to prevent users from circumventing the controls that they put in place?

So you have sort of this two-level thing, if you will. So the service itself is streaming songs. And they want to be in compliance with whatever laws, standards, regulations that they have.

Then the second is they want to prevent users from circumventing those. So vou see how the difference there? So I checked to see that they, in fact, had controls in place to prevent both.

- In terms of the first one, --Q
- 21 A Sure.
 - Q -- why was it important to your

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analysis to address the question of the search functionality on the systems?

A Well, I wanted to understand what could I do in terms of searching for a song. Could I search for a song and an artist and find it on these services on demand and record it?

And they described their controls. And, in fact, they worked as described.

Q So for AOL, were you able to search for a song that was playing at the moment?

A On AOL, I could search for an artist and a song. They had a search box. I put in an artist and a song. And what I got back from AOL was an offer to purchase that album and a suggestion of the genre that that artist belonged to. And I could tune in to the station playing that genre.

Q And did you attempt to find aparticular song that you liked?

A I did.

1 was very similar. I could search for. I was 2 offered the album for sale. I was offered

stations in the rock genre. But at no time
was that song available for me to immediately
begin streaming in such a way that I could

5 begin streaming in such a way that I could6 copy it.

Q And, finally, how about with Live365?

A Live365 operates slightly differently than the other two. It's a service bureau. So it has thousands of stations. But the experience was essentially the same.

I put in the artist and the song.

It did not offer for me to purchase it,
although once you get to some of the stations,
you could purchase it.

But, again, it listed stations that had Jethro Tull "Aqualung." It would say, "This station may have played it in the past. It may play it in the future." But for the many hours I listened, I never heard the

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Q And what was the song?

A I chose a song that I knew that I could recognize immediately. I'm going to show my age here now. But I chose a song I could immediately recognize, which was Jethro Tull's "Aqualung." It has a very unique guitar line in it. So I knew I could immediately recognize it. So I searched for that.

I was offered the opportunity to purchase the album. And I have seen Jethro Tull live twice. So I knew I would recognize the song immediately.

They offered to sell the album to me. And they offered the hard rock or, you know, classic rock genre. And there were several stations. But in the case of AOL Radio, over a number of hours, I never found that song plying, either on demand or during the period of time that I was listening.

Q Okay. And how about with Yahoo!?

A Yahoo! Launchcast the experience

1 song.

Q How many hours did you actually listen trying to find "Aqualung"?

A Much to the chagrin of my wife and my daughter, I listened for, I think I say, 72 hours in here. It was, you know, many, many hours the music was on and I was listening for that song.

9 Q Okay. Now, you also conducted an 10 investigation or an experiment with what you 11 have called peer-to-peer software?

A Yes, yes.

Q Can you tell us what that is?

A Sure. AOL and Yahoo! Launchcast and Live365, they're all server-based systems. So when you go to listen to a song, the song is coming from a central server somewhere in those businesses.

Contrast that with peer-to-peer networks, where there is no central server but there are a number of individuals. All of us with laptops download this peer-to-peer

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software, and we publish songs and we download songs from each other. So that's the first distinction between server-based systems and peer-to-peer.

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And so I went and downloaded a well-known peer-to-peer system called Kazaa. You download a piece of software onto your laptop. It is your Kazaa server now. You are, in fact -- it's kind of a misnomer to say peer-to-peer because there is, in fact, a server. It's just that it's me, instead of a business.

13 So I downloaded Kazaa, installed 14 it. That took quite a lot of work because -15 for many, many reasons, but peer-to-peer 16 networking essentially -- I could go search 17 for Jethro Tull's "Aqualung." And I found a 18 number of peer-to-peer sites that offered it 19 for download.

20 I might point out at this point 21 that these people that are offering downloads 22 on peer-to-peer networks, they're clearly in

software.

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A Sure.

Could you just tell us, if you would, what your understanding is of how the streamripping works?

Sure. Streamripping software, it's kind of a misnomer because the concept of ripping songs has been around for a very long time. In fact, ripping comes from CDs and DVDs, so predates this sort of streamcasting.

11 But in any case, it's - for the 12 purposes of this streamripping software, it's 13 a piece of software that you load on your 14 system that intercepts any music you send to 15 the sound card and allows you to make a copy 16 of it.

17 Okay. And what type of content can you rip or record? 18

You -- any sounds going to your sound card can be copied. So from a CD, an FM broadcast, an MP3, from an iTunes song, any sound, off-the-air television, any sound that

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violation of copyright laws, in my professional technical opinion, not being a lawyer, of course.

So I could come - I could go directly to a peer-to-peer site using the Kazaa software, find exactly the song I wanted from multiple places, and download an MP3 of that song, for example.

Okay. So, just to be clear, then, what you got when you got the song was not a stream of the song?

Yeah. It was not a stream. It was not compressed. It was not encoded. It was the original MP3.

Okay. And how long did it take you to find the song you were looking for when you searched?

Oh, Kazaa? Oh, about three minutes in multiple places that I could have downloaded it. It wasn't just I found it in one place.

Now let's talk about streamripping Q

Page 145

you are sending to the sound card on your PC 2 using, for example, Replay Music, Replay

3 Radio, you can copy that song at will.

4 And, in fact, did you use Replay 5 Music as part of your investigation?

6 I did. I used precisely the 7 Replay Music that Mr. Griffin used. The 8 Applian Company calls it Replay Music, Replay Radio, but I used precisely that piece of 10 software.

Q And what did you do with it?

I copied a song from a CD I owned. I copied a song from my iTunes library. I copied a song off an FM broadcast. I have an FM card in my PC at home. I copied songs from AOL, from Launchcast, from Live365.

17 Now, when you copied the CD, did 18 you select the song that you wanted to copy?

I did.

20 And when you copied the MP3 from 21 the peer-to-peer network, did you select the 22 song?

I did. A

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And when you used the software to copy the song from an FM broadcast, did you select the song?

I copied what was coming over the \mathbf{A} air.

Q And the same question with the webcast. Were you able to choose the song or did you copy what was coming over the air?

10 I copied what was coming over. So AOL, Launchcast, Live365, whatever music was 11 12 there, that's what I copied.

> Q And it wasn't "Aqualung"?

14 A It was not.

> And how did the quality, audio 0

16 quality, of the ripped copies vary?

17 The ripped copies were of the same quality as the original, as the material that 18 19 I was copying. So if it was a CD, it was CD 20 quality. If it was an FM broadcast, it was FM

21 quality. If it was an MP3, it was MP3

22 quality.

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Page 146

1 And, as we just spoke in terms of 2 audio quality, CD copy was the best audio 3 quality. An MP3 or an iTunes was the next --4 downloaded song was of the next quality. Streamed songs were of the next lowest quality 5

6 because of the issues we talked about:

7 compressing and encoding.

8 So if you wanted to get a copy of 9 a song without going out and buying the CD or 10 buying a download, how would you choose to do 11 it?

12 A Well, first of all, I wouldn't do 13 it because it would be in violation, but if I were asked to do it, for example, in this 14 scenario, I would probably borrow my friend's 15 CD first or I would ask for a copy of their 16 17 iTunes or MP3 song. Those would be my first

choice because I would want the highest 18 19 quality digital reproduction of the song.

20 And how about in terms of 21 something like Kazaa versus ripping it from a 22 webcast?

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How do those compare in your opinion to each other?

Well, I list sort of the quality, but the -- if it was from a CD, it was of the highest quality. If it was an MP3, it was sort of the next quality. And if it was a streamed broadcast, a webcast song, then it was of the next lowest quality. And then the lowest would be an FM broadcast.

So what conclusions do you draw, Mr. Nebel, having done these tests about the ability to search for a particular song on these different services?

I reach two conclusions. On the peer-to-peer networks, I could search for a 16 song at will and download it, make a copy of 17 it. And on the three services I looked at, AOL, Launchcast, and Live365, I was not able

to search for a song on demand and record it. Okay. And, again, what are your conclusions with respect to the audio quality of the services?

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1 Oh, and Kazaa or any of the 2 Nutella, Bit Torrent, any of the peer-to-peer networks that are available, that would be 4 very close to iTunes or a downloaded song. So 5 it would be superior to a streamripped -- to a streamcast sound.

> Superior quality? Q

A Superior to a streamcast sound, yep.

10 And on those you would be able to 11 find the song you wanted at the moment you 12 record it?

13 In my experience, yes. With 14 Kazaa, you could go immediately find the song. 15 MR. LARSON: Okay. I have no more 16 questions.

> JUDGE ROBERTS: Mr. Nebel? THE WITNESS: Sure.

19 JUDGE ROBERTS: One question.

20 Jethro Tull's "Aqualung," that song is more 21 than 20 years old.

THE WITNESS: Uh-huh.

Page 152 Page 150 JUDGE ROBERTS: What made you 1 mention that, but that would be correct. 2 Essentially my FM radio card, you hook an choose that song, as opposed to, say, a recent 3 release, maybe something from 50 Cent? antenna to it. And I'm taking off the air an 4 THE WITNESS: Well, I wanted a 4 FM broadcast, digitizing it locally, and then 5 5 song that, first, I could immediately copying it. 6 6 recognize; second, that would be in wide And so yes, I have whatever is 7 7 distribution. I believe Jethro Tull's happening at that FM radio station at the 8 "Aqualung" album has been platinum for a very 8 time, advertisements, fade-in, fade-out, those long time. So there are, whatever platinum 9 sort of things. is, a million records, a hundred million 10 And would you consider that sort 10 11 records. The distribution of it is very wide. 11 of thing, the DJ talk or the fade-ins, 12 So the chances of it being 12 fade-outs, would you consider those to be also 13 distributed out. It also tends to be music 13 factors contributing to a lower quality copy 14 14 that appeals to the technically oriented that you made? 15 people. So they would tend to be the ones to 15 A I could see that. It wouldn't be 16 put it onto their site to stream it. So I 16 a technical quality issue, but it would be 17 thought there would be a high chance of 17 more an audio experience issue. 18 finding it. 18 Right. So if you were of low 19 CHIEF JUDGE SLEDGE: Any 19 ethical standards, as I believe you put it in 20 questions? NPR? 20 your statement? 21 MR. TAYLOR: No, Your Honor. 21 \mathbf{A} Yes. 22 CHIEF JUDGE SLEDGE: Broadcasters? 22 Q That would be a factor that you Page 151 Page 153 MR. ASTLE: A couple of things. 1 would --1 2 2 MR. ASTLE: Good morning, Mr. \mathbf{A} I'm not sure that's the way I 3 3 would say that, but yes, if I were of low Nebel. My name is Matt Astle. I am 4 ethical standards, which I'm not, but if I 4 representing the radio broadcasters in this 5 5 were -proceeding. 6 6 **CROSS-EXAMINATION** Q If you were --7 7 BY MR. ASTLE: \mathbf{A} Yes. 8 8 -- that would be a factor you Just a couple of quick questions. 9 9 would consider in choosing not to record off You mentioned in paragraph 15 of your statement that one of the uses that you used 10 of an FM broadcast, correct, because you 10 11 wouldn't want the DJ talking over the top of 11 the Replay Music software for was to make a 12 your song? copy of an FM over-the-air broadcast on your 12 13 13 \mathbf{A} Yeah. I wouldn't have anything -computer? 14 MR. COWIE: Objection, Your Honor. 14 A Uh-huh. 15 15 Leading. When you made that copy, did you notice that there were other issues with the 16 CHIEF JUDGE SLEDGE: Sustained. 16 17 MR. ASTLE: I am sorry. I am 17 quality of the copy; for example, a DJ talking 18 cross-examining. I haven't asked any 18 over top of the song --19 19 questions. \mathbf{A} Yes. 20 CHIEF JUDGE SLEDGE: That would be 20 -- or a song segueing into another a close question. 21 21 song, the songs covering each other up? 22 22 (Laughter.)

Yes. I didn't specifically

1	Page 154	İ	Page 156		
1	CHIEF JUDGE SLEDGE: Rephrase your	1	CHIEF JUDGE SLEDGE: Sustained.		
` 2	question.		MR. ASTLE: I have no further		
3	MR. ASTLE: I think I got the		questions.		
4	answer to that question.	4	CHIEF JUDGE SLEDGE: All right.		
5	BY MR. ASTLE:	5	What is your time for cross?		
6	Q And these same issues	6	MR. COWIE: My best guess is		
7	A Sure.	7	probably about half an hour. So I don't know		
8	O with an FM over-the-air	8	if you want to break for lunch now.		
9	broadcast would be the same with a radio	9 CHIEF JUDGE SLEDGE: Continue			
10	internet simulcaster who put their exact same	10	MR. STEINTHAL: If it is relevant,		
11	over-the-air signal on the internet, correct?	11	there are no other witnesses for today. So if		
12	A I think what you're asking is	1	12 you are thinking about whether we would go		
13	MR. COWIE: Objection, Your Honor.	13	,		
14	I'm sorry. The question is vague. I'm not	14	venture to offer that fact.		
15	sure if I understood what he was asking.	15	CHIEF JUDGE SLEDGE: I have got a		
16	MR. ASTLE: I can rephrase the	16	problem in that Automation is coming here at		
17	question.	17	12:30 to try to fix problems I'm having. And		
18	BY MR. ASTLE:	18	if we're continuing, they'll leave and I won't		
19	Q We have discussed the issues of	19	see them again.		
20	the fade-in, fade-out, the DJ talking over the	20	I guess we'll go ahead and recess		
21	song,	21	now and return at 2:00 o'clock.		
22	A Right.	22	(Whereupon, a luncheon recess was		
. 22	A Night.	22	(whereupon, a function recess was		
1	Page 155		Page 157		
1	Page 155 O the advertisements. Each of	1	Page 157 taken at 12:22 p.m. until 2:04 p.m.)		
1 2	Q the advertisements. Each of	1 2	taken at 12:22 p.m. until 2:04 p.m.)		
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Page 158 move this document into evidence. 1 1 Mr. Nebel, I saw you paging 2 CHIEF JUDGE SLEDGE: Any objection through the document. Have you seen this 3 document before? to exhibit 146? 4 MR. LARSON: Yes. Your Honor, I I don't know if I have seen this 4 would object. There is no foundation that the precise one. There was a similar one provided 5 witness has seen the document or reviewed it by Live365. I don't know if this is precisely 6 7 or knows what it is. 7 the one. 8 Mr. Lam was here yesterday, who 8 And you said you got the document 0 9 9 from Live365? could have potentially vouched for the 10 document. But this witness has testified that 10 I got a similar document. I don't know if it is precisely the same. 11 11 12 Did you review that document in --12 13 I did. 13 A 14 14 Sorry. Just for the ease on the Q court reporter, it helps if you wait until I 15 15 have finished the question. 16 16

he hasn't reviewed it or seen it. CHIEF JUDGE SLEDGE: Mr. Cowie? MR. COWIE: Your Honor, the witness testified that he received a similar document. This document you will note has the Bates number "NEB," indicating that it was produced in response to our request directed at Mr. Nebel's testimony. I would say that under the regulations, that is sufficient to authenticate and identify this document as the document that Live365 produced to him that he

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And in reviewing that, did you rely on that in drafting your testimony?

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To my recollection, no. I relied on the interview I conducted with a gentleman in Live365.

You had reviewed that document

I reviewed the document I received

that you received from Live365 in preparing

from Live365. I don't know if it's this one,

your testimony here?

but yes, I did.

Do you consider this to be a reliable source of Live365's operations?

If I could read it and understand it, I can answer the question, but --

I should say, the document that you received from Live365, did you consider that to be a reliable source?

I didn't use it in my testimony. So -- well, I didn't make a judgment on whether it was reliable or not if that is your question.

MR. COWIE: Your Honor, given that this document was produced by DiMA in discovery and the witness has testified that he reviewed a similar document, although he is not sure without reading it cover to cover that it's the same document, I would like to

Page 161

has testified that he reviewed in drafting his 1 2 testimony. 3

MR. LARSON: I don't believe he testified that he reviewed this document. He has said that he received a document from Live365, but he wasn't sure that it was this one and in any case didn't review it. CHIEF JUDGE SLEDGE: Respond to

the Bates number.

10 MR. LARSON: I'm sorry? CHIEF JUDGE SLEDGE: Respond to 11 12 the Bates number.

MR. LARSON: Well, the Bates number indicates that it was a document that was provided by Live365. So we don't dispute that Live365 produced a particular document.

CHIEF JUDGE SLEDGE: A document in 17 18 response to his testimony?

MR. LARSON: Correct. But, again, I think the deeper issue is the question of whether he had reviewed it or not or seen it. Again, there's no indication from the witness

1	Page 162 that he	1
Į.	CHIEF JUDGE SLEDGE: You are	2
2		3
3	changing horses. But there is no dispute that	1
4	this is a document produced by Live365 in	4
5	response to a request for documents related to	5
6	this witness' testimony?	6
7	MR. LARSON: That is true	7
8	CHIEF JUDGE SLEDGE: I don't know	8
9	that we have had this specific matter come up	9
10	before. Comments from the Bench?	10
11	That's a good idea. Mr. Nebel,	11
12	why don't you review it and see if you can	12
13	determine if you are familiar with this	13
14	document?	14
15	THE WITNESS: (Perusing document.)	15
16	Okay.	16
17	CHIEF JUDGE SLEDGE: Mr. Cowie?	17
18	BY MR. COWIE:	18
19	Q Is this the document you reviewed	19
20	or can you tell whether or not this is the	20
21	document that you	21
22	A Well, presumably, as I recall,	22
	· -	
	Page 163	
1	there was a request for all documents that	1

Page 164 testimony was the modes of their service. The rest of it is -- I didn't use and describes their service in general and that sort of thing, technical details on nanocasters and servers and those kinds of things. So, just to clarify, your testimony is now that you did receive and review this document? Again, I'm basing it on the fact that it was the document I forwarded to you through Mr. Larson that was forwarded to me by Live365. So I'm presuming that that means that that is the document. CHIEF JUDGE SLEDGE: Mr. Larson, anything further? MR. LARSON: Just again I would renew the objection that I don't believe he has testified he actually looked at the document in preparation of his testimony except that it was forwarded to him in an e-mail, which he didn't look at, and then

forwarded it on to us for production. So,

related to my -- the preparation of my 2 2 3 3 testimony. And I provided a number of documents in discovery, notes from the 4 5 5 interviews, screen shots. And I believe I 6 sent -- I forwarded an e-mail, which I 6 7 7 received from the Live365 folks. 8 8 And in reviewing this, the only thing that I used this for was in preparation 9 10 of my testimony, I talked about the three 10 11 modes of Live365: Live, Basic, and On Demand. 11 12 12 And I said regardless of the mode. 13 So I used this to refresh my 13 14 memory of the three modes, but the rest of it 14 15 - as I recall, this document was a document 15 that the Live365 folks produced for an RIAA 16 17 147. 17 audit as a sort of background description of the service. He volunteered to send it to me. 18 19 I said, "Fine." He sent it to me. I looked 19 20 20 through it. 21 And, again, the only thing I used 21 22 22 was -- the only thing that was germane to my

again, I don't think there's foundation for this witness to sponsor the exhibit. CHIEF JUDGE SLEDGE: With that additional clarification from Mr. Nebel, the objection is overruled. (Whereupon, the aforementioned document, having previously been marked for identification as SoundExchange Exhibit Number SX-146, was received in evidence.) MR. COWIE: Now I am handing out what has been previously marked for identification as SoundExchange trial exhibit (Whereupon, the aforementioned document was marked for identification as SoundExchange Exhibit

	Page 166		Page 168		
- 1	Number SX-147.)	1			
2	BY MR. COWIE:	2	identification as		
3	Q Mr. Nebel, could you take a moment	3	SoundExchange Exhibit		
4	and look through this document?	4	Number SX-147, was		
5	A Yes. I am familiar with it.	5	received in evidence.)		
6	Q I'm sorry? Did you say you were	6	BY MR. COWIE:		
7	familiar with it?	7	Q Mr. Nebel, in paragraph 14 of your		
8	A I am familiar with this, yes.	8	•		
9	This is from the Fries that I reference in my	9			
10	expert report.	10	A Uh-huh.		
11	Q This is the quote that you, among	11	Q Do you recall that?		
12	other things, cite in footnote 7 of your	12	A Yes.		
13	testimony on page 6?	13	· Q And you testified that		
14	A Yes.	14	streamripping software makes an exact copy of		
15	Q You reviewed this document in	15	the stream of bits that is sent to the sound		
16	preparing your testimony?	16	card. Is that right?		
17	A I did.	17	A I don't believe those were my		
18	Q Do you consider Fries Apprise to	18	precise words. What I believe I said was that		
19	be a reliable source on digital media?	19	streamripping works by intercepting the stream		
20	A I consider their work here to be	l e			
21	reliable in terms of the engineering of analog	21	in a PC. I didn't say exact copy. I simply		
22	to digital conversion and digital formats of	22	said it intercepts and copies it.		
		1			
	Page 147		Page 160		
	Page 167	1	Page 169 O Absent a recording error, you		
1 2	files, yes.	1 2	Q Absent a recording error, you		
2	files, yes. Q And you relied on this paper or	2	Q Absent a recording error, you would agree that streamripping software does,		
2 3	files, yes. Q And you relied on this paper or these pages, I should say, in preparing your	2 3	Q Absent a recording error, you		
2 3 4	files, yes. Q And you relied on this paper or these pages, I should say, in preparing your testimony?	2	Q Absent a recording error, you would agree that streamripping software does, in fact, capture the stream bits sent to the sound card?		
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2 3 4 5 6	files, yes. Q And you relied on this paper or these pages, I should say, in preparing your testimony? A I refer to their paper. I'm not	2 3 4 5 6	Q Absent a recording error, you would agree that streamripping software does, in fact, capture the stream bits sent to the sound card? A Streamripping software captures the stream of bits sent to the PC card, yes.		
2 3 4 5 6 7	files, yes. Q And you relied on this paper or these pages, I should say, in preparing your testimony? A I refer to their paper. I'm not sure I know what you mean by "rely," but I refer to their paper as an example of the	2 3 4 5 6 7	Q Absent a recording error, you would agree that streamripping software does, in fact, capture the stream bits sent to the sound card? A Streamripping software captures the stream of bits sent to the PC card, yes. Q And the sound card is what		
2 3 4 5 6 7 8	Q And you relied on this paper or these pages, I should say, in preparing your testimony? A I refer to their paper. I'm not sure I know what you mean by "rely," but I refer to their paper as an example of the types of distortion that I talk about and the	2 3 4 5 6 7 8	Q Absent a recording error, you would agree that streamripping software does, in fact, capture the stream bits sent to the sound card? A Streamripping software captures the stream of bits sent to the PC card, yes. Q And the sound card is what translates that stream of bits into I guess		
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4.3 .

Q The digital that you were just referring to is referring to the stream of bits that's going to the sound card, correct?

A Yes.

Q That stream of bits is being diverted back into analog sound waves?

A That would be the function of the sound card, yes.

Q And the way a sound card works, if it gets the same stream of bits, it makes the same sounds. Is that right?

A Well, I don't know that there is a "Yes" or a "No" answer to that. You simply can't send a stream of bits to the sound card. You have to send a stream of bits that's been encoded in a format that the sound card understands.

So it wouldn't be true to say it reproduces the same stream of bits the same every time. You could conceive of sending a stream of nonsense bits to the card. And it may produce some or it may not. It has to be Page 172

which is going to the speakers. If you go to
two different speakers, you're going to get
two different sounds.

MR. COWIE: That is probably true, Your Honor, although my question was directed at what the sound card itself would do.

CHIEF JUDGE SLEDGE: But you can't hear that.

MR. COWIE: Correct.
CHIEF JUDGE SLEDGE: So okay.
BY MR. COWIE:

Q But it's true, is it not, that given the same set, based on what you just testified to, given the same set of speakers, it will produce the same sound?

A Well, now you're getting into a quality issue. We don't know. We haven't established that this digital stream is an accurate representation of the original sound.

As I was saying this morning, sound starts out as pressure waves. It's analog. It's continuous. There's a series of

Page 171

an encoded stream. It has to make sense.

If I were to begin to recite to you words out of the French dictionary in alphabetical order, they may or may not make sense. So in the same way, the sound card can only reproduce in sound what is represented digitally as sound.

Q That makes sense.

A Sure.

Q Given the same stream of bits as input, the sound card will do the same thing with those bits every time?

A Well, again, technically no, but for -- but if -- let's assume that the digital stream is, in fact, digital audio and it has reliably reproduced a song of music once. Then the next time you play that stream, yes, you'll get the same sound.

CHIEF JUDGE SLEDGE: Mr. Larson? I'm sorry. Mr. Cowie, one thing that your question assumes that probably needs to be clarified is that you left out the next step,

Page 173

compromises to make it digital. It's no longer exactly the same sound.

So when I reproduce it through the sound card and the speaker reproduces those sound waves, we have all seen speakers, right? They vibrate back and forth. They re-create those sound waves. That's not necessarily the same as the original sound.

Q My question wasn't whether or not it was the same as the original. My question was whether or not given the same input, the same stream of bits, that the sound card is processing, whether it would process those bits in the same way each time.

A Well, assuming that the PC, the sound card, had no faults or failures, then yes, it would produce the sound the same, yes. And it was the same speaker as the Judge went

Q I want to step back to -- you
mentioned before, earlier today in your
testimony, you talked about encoding and the

bit rate conversion. And you talked about those being two steps where you could lose some fidelity or lose some quality. Is that right?

A I did say that there were two steps, yes, and that you could lose quality at each step.

Q And encoding refers to the process of compressing an audio file. Is that right?

A Well, yes and no. Those are two separate processes. Typically encoding means converting what is now a digital representation of the sound into a format that can be replayed reliably on a sound card or on an MP3 player or an iPod.

So encoding is taking that digital song and putting it into the format that will reliably replay on a given sound card or, say, MP3 player. That's encoding.

That entails some compression and some trade-offs and in terms of what kind of quality you are going to get. It's

Page 176

And if you look under "Encoding,"
the heading marked "Encoding," there is a
sentence that says "Encoding is the process of
converting uncompressed digital audio to a
compressed format, such as MP3." Is that what
that says?

A Uh-huh. Yes, it does say that.

Q And, actually, step back a little
bit. Previously today you testified that an
MP3 was uncompressed.

A I don't remember saying that.

Q An MP3 is, in fact, a compressed file. Is that right?

A The process of encoding the MP3 does include compression, but not every encoding scheme includes compression.

Q But MP3, is --

A MP3 does.

19 Q -- in fact, always compressed?

A No, I wouldn't say that that's true. There are various -- I have other

22 references where we talk about MP3 that's not

Page 175

essentially size of the file versus quality. That's encoding.

Q Let me parse back through your answer for a second. My question has been whether or not encoding involved compressing the sound file. And in your answer, you just said that encoding did indeed involve compressing and making some trade-offs with regards to file size.

So let me ask the question again. Is encoding the process of compressing the file?

A It could be. Encoding can include compression. It doesn't always. Encoding simply means making it ready for the digital replayer. It can include compression.

Q I would like you to take a look at what has been marked as SoundExchange trial exhibit 147. Look at the page that's been Bates stamped, which is the stamp in the lower right corner, "NEB61." It's page 6 of 9, top corner.

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compressed.

Q The MP3 loss-less format?

A Right, yes.

Q And when you talked about format for playability, MP3 is an example of that? It's a format that can be played by sound cards and --

A MP3 is an example of a format where you encode the original digital audio into a form that can be replayed by an MP3 player.

Q Like, for example, an iPod?

A Technically no. An iPod only
plays iTunes songs. It doesn't — to get an
MP3 into your iPod, you have to run it through
iTunes and convert it to the Apple format but
—

Q I have iPods. MP3 --

A You have to drag the MP3 into your iTunes player. You can't just take an MP3 and put it directly onto your iPod. You have to convert it. But that's it. Trust me.

Page 181

Page 178 person takes a CD and rips a file so that they 1 And, actually, the iTunes format 2 have a file in their computer, they have a that's used is what is called the AAC format, 3 digital representation of a CD. Is that right? 4 right? \mathbf{A} Correct. 5 If a person takes a CD and copies 0 Now, the second step in encoding the digital file off the CD, -- you could call -- or not encoding. I'm sorry. The second 6 7 it ripping or copying or whatever -- then yes, step in creating a playable or a streamable 8 you would have a copy of that original file. file that you testified about was what you 9 And in order to stream that file, called the bit rate format change. Is that 10 I believe your testimony was that you would right? 11 have to do the bit rate conversion that you Uh-huh. Yes. \mathbf{A} 12 iust talked about? 12 0 And the bit rate when we talk 13 Well, you have to do two steps to about that, what you mean is that you are 14 stream it. You have to encode it into some 14 taking and transmitting the file at a certain bit rate, compressing it so that it can be 15 format that a player can recognize. And then you have to decide the bit rate that you are transmitted at that rate. Is that right? 16 17 going to stream it at and choose the file size Yes. The second -- the latter 18 part of that is correct. You have an MP3. 18 based on that. So you have a two-step 19 process, sometimes even a third step process. 19 You want to now stream it. You want to 20 For example, in the case of the 20 webcast it. You have to choose the bit rate that you're going to send that out. And the 21 Live365 folks, if you're in the mode where you 22 are using their servers, you have to transfer slower the bit rate -- well, in any case, you Page 179 1 the file up to their server. And there may be have to compress it, regardless of the bit some translation and such that happens. But

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transmit. Now, if I buy a song from iTunes, that song is transmitted to me at a particular bit rate. Is that right?

there's at least two steps: encoding and then

appropriate bit rate size that you're going to

compressing and reducing your file to the

No, that would not be correct. \mathbf{A}

When you buy a song from iTunes, 0 you download the iTunes-encoded song? There is no streaming or broadcasting? You simply download the file?

MR. COWIE: I have what has been marked as SoundExchange trial exhibit 148.

(Whereupon, the aforementioned document was marked for identification as SoundExchange Exhibit Number SX-148.)

rate. But you choose how big of a file you're willing to transmit.

And, all things being equal between files, a higher bit rate is a larger

6 file. 7

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A Yes.

And I believe you testified earlier that a higher bit rate has higher quality sound, all things being equal?

Well, a larger file generally has higher quality. There's more data.

But if you have a 128-kilobit-per-second version of a file and

you have a 196-kilobit-per-second version of the same exact file, same original source

16 material, you would agree, wouldn't you, that 17 18 the 196 version would have better fidelity?

19 In general, the higher bit rate 120 should have better fidelity, yes.

> Paragraph -- well, actually, let me follow up on that a little bit. So if a

Page 182 Page 184 you do an analog recording or a digital 1 BY MR. COWIE: 1 2 2 record. So I can't say precisely because I Now, looking at SoundExchange 3 trial exhibit 148, if you look at the third 3 don't know if your CD was originally -- you paragraph from the top, it says, "Songs 4 know, there's AAD and DDD and that sort of thing and the CD is right there, analog to 5 purchased and downloaded from the iTunes store 5 6 are AAC-protected files and have a bit rate of 6 analog to digital. 7 First there's the original 7 128 kilobits per second." Do you see that? 8 8 recording. Then there's the master. Then A I do. 9 THE WITNESS: This would be an 9 there's the CD. That can be 10 example of a poorly written technical manual. 10 analog-analog-digital, analog-digital-digital, 11 MR. COWIE: Move to strike that as 11 or digital-digital, as your client 12 nonresponsive, please. 12 probably knows much better than I do. 13 CHIEF JUDGE SLEDGE: Motion is 13 So which of those do you want me 14 granted. 14 to precisely make the answer to? 15 BY MR. COWIE: 15 Well, start off with the fact that 16 Mr. Nebel, I would like you to 16 17 take a look at paragraph 8 of your testimony. 17 A Sure. 18 You say, and I quote, "A digital copy is not -- every single one of your 18 automatically a perfect copy." Do you see 19 examples ended with "digital," which was the 19 20 that? 20 CD, correct? 21 21 \mathbf{A} Where is that in paragraph 8? A I don't know what you mean by 22 JUDGE WISNIEWSKI: Second line 22 "every one of" my "examples." Page 183 Page 185 1 MR. COWIE: Thank you, Your Honor. 1 You said AAD, ADD, and DDD, were 2 2 your three examples. THE WITNESS: I don't see that in 3 paragraph 8, second line. What page is that? 3 A Right. Yes. 4 4 The A is referring to analog. JUDGE ROBERTS: Page 6, first Q 5 5 A Those examples, right. sentence. 6 6 D is referring to digital. THE WITNESS: Oh, first sentence. Q 7 Okay. First sentence of paragraph 8. Yes. 7 A Yes. 8 JUDGE ROBERTS: Paragraph 8. 8 Q And the last D, the digital, was 9 THE WITNESS: Yes, I do see that. 9 the CD. Is that right? 10 10 BY MR. COWIE: A In that case, it would be a CD. 11 I just want to be clear. When you 11 Sure. 12 12 were talking about problems with loss due to And so when you're talking about 13 13 conversions from analog to digital, that's the paragraph 8, those are all problems that are just inherent in digitizing analog music? 14 loss that incurs when you make a CD. Is that 14 15 right? 15 Yeah, absolutely. The process of 16 It is the loss when you make any 16 taking an analog pressure wave and converting 17 17 it to a digital representation is a series of analog to digital conversion, yes. 18 And that would include making a 18 compromises and losses so that, regardless, 19 19 CD, which is a digital replication of an the CD that you end up with is not a true 20 20 reproduction of the music. analog event? 21 21 So the CD is, in fact, what you're Well, a CD is the culmination of a 22 saying, not a true reproduction of the music? 22 series of steps in the process depending on if

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 \cdot **A** That's correct.

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But given a CD, you would agree that you can make an exact copy of a CD. You can make the exact same zeros and ones or representations thereof.

Well, yes and no. If you understand how a CD works, it spins. It's a series of laser pits that have been laser-etched in the CD and a series of gaps between the pits.

It's the disk spins. There's a laser, another laser in the CD reader that bounces the beam. When it hits a pit, which is in the end not a perfect digital representation. It's something that's burned in the plastic.

So you often get reflections that don't quite work. And then on the surface, where there's the gap between the pits, you get fingerprints and dust and scratches and those sort of things.

So what happens when you are

Page 188

1 correction techniques, you could make an exact 2 copy of that file?

A Well, to the limitations of your computer, sure, you can make a copy of the file.

I just want to clarify something 0 Judge Roberts asked about. He mentioned the song "Aqualung"," which I think he said was 20 years old, unfortunately. Actually, it's closer to 35.

JUDGE ROBERTS: It is more than 20.

BY MR. COWIE:

And you testified as to why you picked that. Did you try and record any song other than "Aqualung"?

I recorded a number of other songs. I took an iTune song, and I recorded it. I took music off a CD I had.

Did you search Live365, Yahoo!, and AOL for any other songs besides "Aqualung"?

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playing back a CD when you're copying it, whether digital or you're going to put it in your CD player and listen to it, you have a set of software in there that interpolates and says, "Well, I can read most of the pits. And I can read most of the gaps. And so I can reproduce pretty close to the sound that was on there."

And, in fact, the sampling rate at 44.1 kilohertz is twice the highest expected frequency, about 20,000 hertz, which, as it turns out, is the bound of our ability to listen to music.

So the sampling rate is fast enough. And there is software in there to reproduce the sound that most of the errors you get reading a CD are made up for.

And once you have made that, so once you have taken the CD and read it and converted it into zeros and ones based upon your best read or the machine's best read of the CD, that digital file with proper error

Page 189

I may have searched for other artists and songs. I didn't use them in the testimony.

There's nothing in your testimony about looking for an artist that, say, released a song within the last year, for example?

A There's nothing in my testimony.

9 And there's nothing in your 10 testimony about looking for, for example, 11 something like a Beatles song?

Oh, I did, in fact, look for a Beatles song, but I was not successful in the same way I was successful with "Aqualung."

Now, did you mention --

No. I didn't put it in -- I did not put it in the testimony.

And did you produce any documents relating to having looked for a Beatles song?

No. The question was, did I do that? The answer is yes. But no, it's not in the testimony.

Page 192 Page 190 look in the upper left corner there, see, it 1 And you didn't produce any 1 Q 2 says, "Search for aqualung"? documentation of having done that either? 3 I did not. 3 Correct. My question is, is this a screen shot of your search? 4 Now, you did testify, I believe, 4 Q that you were able to rip or record copies of 5 Again, presuming since this -- you 5 have the Bates and that's what we produced, the song "Aqualung" from multiple sources on 6 6 7 Kazaa. Is that right? 7 then it is my search, yes. 8 8 And you recall it says -- I guess A No, that's not what I said. 9 9 when you look under "Aqualung," it says, Okay. Just refresh my memory as Q 10 to what you said about --10 "Found two files." Do you recall that being 11 the result you had? 11 In terms of --12 12 -- recording the "Aqualung" song. This is the result, yes, uh-huh, Q We had three things there: the 13 when you search for the word "aqualung." 13 And could you show me looking at 14 "Aqualung," Kazaa, or ripping. 14 Your attempts to find "Aqualung" that where it is that you see Jethro Tull's 15 15 16 on Kazaa? 16 song "Aqualung"? 17 17 A Well, this is not a search for A Oh, I found "Aqualung" immediately. "jethro tull aqualung." This is a search for 18 18 19 Q But you didn't record it? 19 the word "aqualung." 20 20 No, I didn't record it. But it doesn't show -- Jethro Tull A 21 21 MR. COWIE: One forty-nine. was not found in this search? 22 (Whereupon, the 22 Not in this particular screen Page 191 Page 193 1 aforementioned document 1 shot. That's correct. 2 was marked for 2 Were there other screen shots 3 identification as 3 where you did find Jethro Tull's "Aqualung"? 4 4 SoundExchange Exhibit 5 Number SX-149.) 5 Q Why didn't you produce those? 6 6 MR. COWIE: I'm handing out what A You know, this is the one I 7 7 has been marked SoundExchange trial exhibit produced. 8 149. 8 And you agree that when you 9 9 searched for "aqualung" in this search, you BY MR. COWIE: 10 10 didn't find Jethro Tull's "Aqualung"? Q Just take a look at that, if you 11 would, Mr. Nebel. This is a document that was 11 In this particular screen shot, 12 produced to us by DiMA in discovery. You can 12 no. see that it's marked "NEB82" at the bottom or 13 13 You testified earlier today a 14 the bottom if you're holding it portrait. 14 little bit about your background. And I 15 15 believe you mentioned the LMIV project. Is Is this a screen shot of your 16 search? 16 that right? 17 I did mention that. 17 A This is a screen shot of Kazaa, A

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that right?

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And you mentioned that that was a

Local Media Internet Ventures is a

venture or a piece of software that allowed

you to buy music over your cell phone. Is

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yes.

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search for "Aqualung"?

And is this a screen shot of your

It's a screen shot of a search

that includes the word "aqualung." If you

-- it was a venture fund-backed internet 2 company. And they had a series of 3 technologies, which, at essence, was they were going to internet simulcast radio stations in 5 local media, so go around to not the large guys, not the large broadcast companies that 7 have lots of stations and lots of markets, but 8 the individual stations in smaller markets, 9 and offer them the opportunity to simulcast on 10 the internet and to share in the revenue from 11 music sales that would happen through a couple 12 of pieces of technology.

The first was in FM radio, you have the RDS. You can send data through the FM signal. And if you have a modern radio, you can see that that is the song announcement on your radio display, that sort of thing.

They were going to send a code through there, a five-digit code. And then with your cell phone or through your internet connection, you could order that album playing on that station at the time.

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analysis, but I was more of the -- you know, 1 2 I was an executive at True Secure. So we had 3 a number of people who would do the specific 4 work.

5 But you were involved with that 0 6 project to some extent?

Yes. I helped sell the project and close the deal and that sort of thing.

And after your company analyzed the DRM, what was your conclusion regarding its efficacy?

Well, I can't really speak to that. We're under nondisclosure.

14 Let me ask a more general 15 question, then. Based on your history and 16 experience in the field, are you aware of 17 digital rights management software of any sort 18 that works as sold, I guess, for lack of a 19 better term?

Well, all software, of course, is designed and coded and written by humans. Humans make errors. So all software has

Page 195

Would you be listening to that stream of music on your cell phone or --

No. This was eight or nine years ago. You would call a number and plug in the code and purchase the album.

You also testified about the Movie Link project. And I believe you said that you -- I'm sorry. Was it you personally? Did you actually do the analysis for that project?

There were two projects that we did for Movie Link while I was at True Secure. The first was we provided internet security services for them, kind of an annual subscription to help make sure that their infrastructure was secure, prevent hackers and that sort of thing.

And then we were asked to help evaluate their digital rights management

Did you do the evaluation of the digital rights management software?

I was involved with some of the

Page 197

faults in it.

But you would agree that it's possible to write DRM software to protect, for example, movies as they are transmitted over the internet?

I'm not sure if I understand your questions. There's two ways you could answer that.

Why don't you start with the first Q one?

There's certainly a lot of money being spent. And there are programmers writing DRM software. I would agree that that is occurring. As an auditor, no software is perfect. And so there's a lot of faulty DRM out there.

17 Q Would you agree that DRM provides 18 some protection if implemented properly?

19 I would say that yes, DRM provides 20 some level of control over access.

Look at paragraph 7 of your testimony and footnote 6. It's on page 5.

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Page 198 Page 200 claim, and I quote, that "Mr. Griffin's Here you're testifying about problems if you 1 look at the bottom of the page, problems with 2 testimony is 'grossly inaccurate'." 3 Now, in that same paragraph, you the Yahoo! Launchcast streaming software. 4 cite to several pages of Mr. Griffin's I'm speaking about issues that the 4 5 testimony during the oral hearing. Do you see 5 general user would have getting Launchcast to 6 that? 6 work, ves. 7 7 And you're aware, aren't you, that A No, I don't believe so. 8 Q It's the fifth line from the 8 more people listen to Launcheast each month than to any other webcaster? 9 beginning of the paragraph. 9 10 10 I believe I refer to Griffin's I would have no idea. 11 You would agree, wouldn't you, 11 testimony but not specific paragraphs or 0 12 that Yahoo! wants people to be able to listen 12 sentences. 13 to Launchcast? 13 Take a look at the fifth line from the top of paragraph 4, the end of the 14 MR. LARSON: Objection, Your 14 15 sentence that ends, "create additional copy of 15 Honor. Foundation for this witness to speak that song (5/2/06 HT 90-94,108-109)." to what Yahoo! wants. 16 16 17 CHIEF JUDGE SLEDGE: I will see 17 Right. So that would be about 18 what his answer is. I suspect you are 18 eight or nine pages out of his testimony, --19 probably right, but overruled. 19 Q Right. 20 THE WITNESS: Could you repeat the 20 -- as opposed to specific 21 21 question? sentences or paragraphs. I refer in general 22 BY MR. COWIE: 22 to pages ---Page 201 Page 199 You would agree, wouldn't you, 1 My question was that you referred 1 2 to pages of his testimony. 2 that Yahoo! wants people to be able to listen 3 MR. COWIE: I'm handing out what 3 to Launchcast? has been marked as SoundExchange trial exhibit 4 I would have no basis to answer 4 A 5 5 150. that. 6 6 (Whereupon, the As a common sense matter, would 0 7 you agree that --7 aforementioned document 8 8 was marked for Well, I don't know their business 9 identification as 9 model. So I don't really know. There would 10 SoundExchange Exhibit 10 be no way to answer that. I'm an engineer. 11 Number SX-150.) It's your testimony that they 11 12 BY MR. COWIE: would have a business model where they would 12 13 not want people to be able to listen to one of 13 These are those pages that you 14 their products? 14 cited to. So in paragraph 4 of your testimony, you say, and I quote, "James 15 CHIEF JUDGE SLEDGE: Mr. Cowie, 15 16 let's move on to something helpful. 16 Griffin testified during the direct phase of this proceeding that streamripping software, 17 MR. COWIE: All right. 17 18 such as Replay Radio, when combined with BY MR. COWIE: 18 19 services such as AOL Radio, Yahoo! Launchcast, 19 Let's take a look at paragraph 4 20 or Live365, in effect, allows end users to 20 of your testimony. You made some 21 easily search, immediately find an artist or characterizations about Mr. Griffin's 21 22 song playing at that very moment, and then 22 testimony in this proceeding. In fact, you

Page 202 Page 204 1 talking about Yahoo!, is he? create a digital copy of that song." And then 2 Well, again, I reference 90 to 94 you cite to, we'll start with, pages 90 to 94 3 and 108 to 109. So --3 of the May 2nd transcript. 4 So you referenced pages 90 to 94 4 So I would like you to look at 5 of your testimony as being for this page 89 in the transcript, which is marked proposition. Is that right? page 23 at the bottom. With the four pages on 6 6 a single page, the page number is in the upper 7 Well, yes and no. A 7 8 No? right corner of the page in question. 0 8 9 9 Have you found page 89? A The reference here is where his 10 claim is that you can easily search and 10 Uh-huh. Yes. A 0 Second question from the bottom of 11 immediately find. And then I give as --11 When combined with services such 12 that page, "Okay. Let's take a look at that 12 as AOL Radio, Yahoo! Launchcast, or Live365. 13 demonstration. And this appears to be 13 Shoutcast. 14 I mean, that's your testimony. 14 15 "Answer: Right." 15 Uh-huh. Again, I don't have the 16 complete here. So I can't answer the question And then go on to the next page. 16 17 because I cite 90 to 94 and 108 to 109. He's 17 And these are the pages that you point to in 18 your testimony, pages 90 to 94 on this page 18 provided only --19 CHIEF JUDGE SLEDGE: You are 19 and the one following it. Mr. Griffin 20 20 testified about Shoutcast on these pages. reading more into his question than he's 21 21 Isn't that right? asking. He's asked you, is there a reference 22 22 on pages 90 to 94 to those points? A Apparently. Page 205 Page 203 1 So he wasn't testifying about 1 THE WITNESS: On page 90, there is Q 2 Yahoo!, correct? 2 not a reference. No, he said on page 909. On 3 3 Well, may I read the rest of it? page 90, no, there is not a reference. 4 0 The rest of the --4 BY MR. COWIE: 5 5 A The rest of the testimony of There is not a reference, in fact, 6 6 Griffin. anywhere on pages 90 through 94? 7 You can read that, yes. If you 7 Well, again, can I read it? A 8 8 want to read the four pages, sure. Q Sure. 9 9 Sure. Well, it's 90 to 94 and 108 On page -- well, on 90 to 94. 10 to 109, which I don't see here. So I have 10 Uh-huh. Page 90, AOL Music. only 90 to 94, not 108 to 109, which I refer 11 11 0 Well, you didn't --12 to 90 to 94 and 108 to 109. 12 Excuse me, sir. I'm answering. 13 CHIEF JUDGE SLEDGE: He only asked 13 Page 91, Live365. So yes, both Live365 and 14 you about 90 to 94. AOL Music, AOL Radio are referenced. 14 15 THE WITNESS: Certainly I 15 Let's just be clear here. Looking 16 understand that, Your Honor. 16 at page 90, where it says, "AOL Music," that's 17 CHIEF JUDGE SLEDGE: That is the 17 referring to Shoutcast, correct? only question presented. 18 18 I don't know. 19 THE WITNESS: Okay. So would you 19 You are aware, aren't you, that repeat your question, please? 20 Shoutcast is an AOL Music property? 20 21 BY MR. COWIE: 21 A No. 22 22 On pages 90 to 94, he's not Q Have you ever used Shoutcast?

Page 208 Page 206 1 to you folks. 1 A No. 2 0 So you wouldn't be able to testify 2 And he described the process by 3 which they monitor their broadcasters after one way or another as to whether or not Mr. 4 4 Griffin's testimony regarding Shoutcast is the fact. What do you mean by "monitor" them 5 5 0 true? 6 "after the fact"? 6 A That's correct. 7 For -- it's my understanding that 7 Did you review the video that Mr. 0 Griffin submitted as exhibit 501 with his 8 8 under DMCA, you can't repeat a song for so 9 many times in a certain period of time. And 9 testimony? 10 you can't publish the play list ahead of time. I received two DVDs. And I looked 10 A through many, perhaps all of the playbacks 11 So he monitors his broadcasters to make sure 11 12 that they haven't run afoul of those there. So ves, I have seen those files. 12 13 provisions. 13 So you reviewed his video of Q Live365 has thousands of 14 Shoutcast? 14 0 15 broadcasters, right? I don't specifically recall if I 15 A 16 I have no idea. 16 saw the Shoutcast one or not. But you did look at the site in 17 O But you yourself never used 17 Q reviewing? You did ---18 18 Shoutcast? 19 Sure. I went to www.live365.com. 19 That's correct. In preparing for A this testimony, I did not use Shoutcast. In your discussions with this 20 20 O 21 Have you used Shoutcast other than 21 technical manager, did he or she explain 22 whether they monitored all Live365 broadcasts 22 preparing of this testimony? Page 207 Page 209 1 all the time? 1 A No. 2 2 In paragraph 12 of your testimony, Well, they have three different 0 you say that, and I quote, "Live365 monitors 3 modes. In the mode where they have the all of its broadcasts." Do you see that eight 4 server, they can monitor in real time. In the 5 lines from the bottom of that paragraph? 5 case where they are simply a relay, they do it 6 The sentence reads, "Moreover, 6 after the fact. That was his description of 7 Live365 monitors all of its broadcasters." 7 it. "Broadcasters." I'm sorry. Yes. 8 Okay. That wasn't exactly my 8 Q 9 I misspoke. 9 question. And if you don't know the answer to 10 my question, that's fine. Did he say whether 10 And, as part of preparing your testimony, you reviewed the Live365 site. Is or not they monitor all of Live365 broadcasts 11 11 12 that right? 12 all of the time? 13 13 Well, I don't know what "all of A Yes. How does Live365 monitor all of 14 the time" means.

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after the fact.

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Continuously.

Presumably.

A Well, some stations they monitor continuously, the ones where they have the

content on their servers. And the stations

where they don't have the content, they do it

They do it for every single one?

its broadcasts?

A In addition to downloading Live365
and listening to music, searching, and that

and listening to music, searching, and that sort of thing, again, I interviewed a

19 technical manager; in fact, the founder of

20 Live365, the one who provided the document

21 that we talked about earlier. And we also

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2 provided my handwritten note to that interview

Page 212 Page 210 1 that are included in this handout, correct? 1 0 But you don't know for sure? 2 There are, in fact, many other I didn't personally go out and audit and bet that he does it for every single 3 pages. 4 Could I direct your attention to one. The document he produced was a document pages 85 and 86? he produced for an RIAA audit. So presumably 5 6 RIAA or somebody else like that has done those A Yes. 7 audits to understand whether he's doing it 100 Do you see on page 85 there is a question to Mr. Griffin whether he is familiar percent continuously all of the time. I don't 8 9 with a webcaster called Live365? 9 know the answer to that. 10 10 I think you're reading more into Yes, I see that. 11 my question than I intended. I just want to 11 Okay. And then the conversation 12 know what he told you. Did he tell you that 12 continues. Feel free to read it if you would he monitored them, you know, after the fact 13 13 like. 14 that he monitored every single station, or did 14 "Did you do a demonstration of he just say something general like "We monitor 15 15 Live365? I did. I went to Live365." 16 them after the fact"? I'm sorry. You don't need to read 16 Q 17 A No. I gave you the precise 17 it out loud. 18 answer. The ones where he has the content, 18 A Oh. Sorry. 19 19 they're monitored before they're broadcast. You can just read it to yourself. 20 And the ones where he doesn't have the 20 And I'm going to ask you a question about page 21 content, he monitors them after the fact. And 21 86. then if they have violated, he shuts them 22 CHIEF JUDGE SLEDGE: You were: Page 213 Page 211 1 reading it very well, though. 1 down. 2 2 (Laughter.) And the ones he monitors ahead of 3 3 THE WITNESS: Why, thank you, sir. time, the song never gets to go. That was his 4 4 BY MR. LARSON: description. 5 5 MR. COWIE: I have no further Now, you will see over on page 86 6 6 questions, Your Honor. 7 CHIEF JUDGE SLEDGE: Mr. Larson, 7 A Yes. 8 8 any further questions? -- and I will read this part for 9 9 MR. LARSON: Just a couple, Your you -- "For example, it says find stations to play the music you want to hear. So it offers 10 Honor. If I can just have one moment, sir? 10 11 CHIEF JUDGE SLEDGE: All right, 11 me this opportunity to type in, say, the name 12 of an artist and to say if I want to hear the 12 sir. 13 13 Rolling Stones or if I want to hear the (Pause.) 14 MR. LARSON: Mr. Nebel, I just 14 Beatles or whatever. I would type the name 15 in, and it would say, 'Well, here at the 15 have a couple of follow-up questions for you. 16 THE WITNESS: Okay. 16 stations." I presume that means, "Well, here 17 REDIRECT EXAMINATION 17 are the stations that play that kind of music 18 or specifically that artist." 18 BY MR. LARSON: 19 Could you take a look at what was 19 A Yes. And it continues. "There is a 20 marked as -- actually, mine is not marked --20

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the transcript from Mr. Griffin's testimony.

One fifty? Now, there are some other pages

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more advanced search as well that allows you

to go into song titles and so forth." And

Page 216 Page 214 then there is an offering, "Well, if you don't BY MR. LARSON: 1 2 Let me ask more generally, when 2 wish" -- well, I'll stop there. 3 you made the assertions you make about Mr. 3 Page 86 is a page that you Griffin's testimony, were they all based on actually cite in paragraph 12 of your 4 5 5 explicit statements by Mr. Griffin in the testimony, correct? pages cited? 6 Yes, that's correct. 6 A 7 7 They were -- the specific Q And when you made the claim you 8 instances that we have just covered and talked made about Mr. Griffin's testimony, did you, 8 9 about, the claims of being able to do search 9 in fact, have this conversation in mind? 10 at Live365 and immediately find the song 10 Yes. I had this in mind and 11 "Greenday" -- I don't know if Greenday is an 11 several other claims, but yes, I had this 12 artist or a song -- but immediately be able to 12 conversation in mind. find it and the implication that you can 13 I will just direct your attention 13 14 in this handout to page 216. Do you see it 14 record it, yes, that you could immediately 15 find it and record it. 15 says, "Question: What aspects of on-demand 16 streaming do you understand to be covered by Mr. Griffin makes many other 16 17 17 this proceeding"? claims that are simply not correct. 18 Okay. Let's take a look at 18 A Yes. 19 19 exhibit 148, if you could, please. "Answer: Well, an example would 20 be I went to Live365. And I said, 'I want to 20 A Yes. hear Greenday' or 'Shoutcast.'" And it gives 21 21 And I direct your attention to the Q third paragraph --22 me channels that have Greenday. And so there 22 Page 215 Page 217 1 I'm clearly interacting. And I'm saying I 1 A Yes. 2 -- that Mr. Cowie was asking you 2 would like to hear Greenday. And it offers me Q 3 about? 3 multiple opportunities to listen to Greenday? 4 4 Yes, I see that. A Yes. 5 5 Can you just tell me whether you Q Did you cite this page 216 in your 0 6 testimony? 6 believe that statement to be correct? 7 7 \mathbf{A} Yes, I did. I believe that this is a typo in 8 an engineering technical manual, which happens 8 And when you were making the Q 9 assertions you were making about Mr. Griffin's quite a lot. This is a user manual that 9 10 testimony, was this colloquy that I just read 10 somebody wrote. And they attempted to - the 11 part of your basis? 11 writer of this manual, technical writer, 12 attempted to interpret what the engineer was 12 Yes, it was; again, among other of 13 telling them. You will notice that the second 13 his claims but yes. paragraph says, "Purchased songs are encoded 14 CHIEF JUDGE SLEDGE: Mr. Larson, 14 15 using MPEG4." That's that encoding process we 15 where are these cite pages mentioned? talked about earlier. 16 MR. LARSON: In paragraph 12, page 16 And then it says, "Songs purchased 216 of Mr. Griffin's testimony. 17 17 and downloaded from the iTunes store are 18 THE WITNESS: Paragraph 12 of my 18 AEC-protected files." And AEC is the digital 19 19 testimony. 20 rights management, the name of the digital 20 MR. LARSON: Paragraph 12 of Mr. 21 rights management program that Apple uses. 21 Nebel's testimony. 22 And right now the third sentence says, the 22 CHIEF JUDGE SLEDGE: Paragraph 12.

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third paragraph, "And have a bit rate of 128 kilobits per second." That should really read, "And can support playback at a bit rate of 128 kilobits per second."

When you download the MPEG4 from

iTunes, you can play it in your computer using the iTunes player with a 128-kilobit rate. But when you write it to your iPod, you're writing the MPEG4 file, the completely -- the full MPEG4 file and not the smaller 128-kilobit rate that you would use in your iTunes player in your computer. This is

12 simply a technical error by the writer of this 13 manual. 14

15 0 Let me ask you one more question. 16 I want to ask you about "Aqualung" one more 17

18 \mathbf{A} Sure.

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19 0 Are you familiar with the fact 20 that the services at issue here, Yahoo!, AOL,

21 Live365, have top 40 or pop stations?

I am familiar with that. AOL

see whether you could hear the song? 1

I don't remember the precise name of the stations. Each of these stations -oh, on AOL and Yahoo! Launchcast, they would have like classic rock, hard rock, rock, those sort of things.

Live365 is slightly different. Live365 is a series of broadcasters. So they would name their station usually after 10 themselves or their favorite pet or something 11 like that. So it could be Jose's Rock 12 Channel, you know, or that sort of thing.

13 Well, as for Yahoo! and AOL, did 14 you choose stations, though, that you expected 15 would be ones that would be playing "Aqualung"? 16

17 Yes. I would choose the rock A 18 genre, which would have a high likelihood of 19 playing that kind of song. Yes.

20 MR. LARSON: I have no more 21 questions.

CHIEF JUDGE SLEDGE: Mr. Cowie,

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Radio and Yahoo! Launchcast -- well, not as much Live365 because it's a slightly different model, but each of them have what you would call top 40 or pop music stations, yes.

Okay. And do you have an understanding that they have what we might call classic rock stations or --

MR. COWIE: I am going to object, Your Honor. This is well beyond the scope of both my cross-examination and Mr. Nebel's direct testimony.

12 CHIEF JUDGE SLEDGE: No, sir. 13 Overruled.

THE WITNESS: I believe your question is, do -- AOL, Launchcast, and Live365, do they have many other genres besides pop? They have thousands of genres.

MR. LARSON: Okay. BY MR. LARSON:

Q And when you were searching for "Aqualung," which stations, if you can recall, did you search or listen to in an attempt to

any further questions?

2 MR. COWIE: Just a couple, Your 3 Honor.

> **RECROSS-EXAMINATION** BY MR. COWIE:

6 Looking back at what has been 7 marked as SoundExchange trial exhibit 150, on 8 page 86, I just want to clarify something. 9 Mr. Griffin says, "So it offers me this

10 opportunity" -- and he's talking about Live365 11 here, right?

Referring back to page 85, the question is. "Did you do a demonstration of Live365?" I did. And the series of questions then follows that carries over into page 86. His response carries over into page 86.

And he says in his response, "So it offers me this opportunity to type in, say, the name of an artist to -- say if I want to hear the Rolling Stones or if I want to hear the Beatles or whatever, I would type that name in. And it would say, 'Well, here are

Page 221

Page 222 Page 224 the stations that play that kind of music or 1 can understand them. 2 specifically that artist." 2 I am troubled by one of your two 3 3 primary theses in your testimony. And that's Look at paragraph 12 of your testimony. You say the same thing, don't you? 4 in paragraphs 16 and 18 contrasting your 5 And I quote, "You can, in fact, search Live365 5 activity with that of Griffin on searching and 6 6 and obtain a list of stations that have the finding desired songs or artists. 7 You used a 35-year-old song for 7 artist or song listed on their play list." your search, which would be extremely low on 8 That's an accurate characterization of 8 9 9 Live365? the charts. And he used a group that is very 10 10 popular and very high on the charts. A Yes. 11 MR. COWIE: Nothing further, Your 11 Is your only explanation for that 12 that you used genre stations that emphasized 12 Honor. 35-year-old songs? 13 CHIEF JUDGE SLEDGE: Any questions 13 14 14 THE WITNESS: No, sir. In my from the Bench? 15 JUDGE WISNIEWSKI: I have just 15 testimony, what I stated was -- and this is 16 what occurred -- I would go to AOL Radio. And one. I am curious, Mr. Nebel. I think you 16 17 testified that you had spent a total of 72 17 I would type in "Jethro Tull Aqualung." And 18 hours trying to listen for this song that we 18 I would immediately be provided with the 19 have heard too much about here today? 19 opportunity to buy the album, and I would also 20 THE WITNESS: Yes. 20 be provided with a number of rock stations 21 JUDGE WISNIEWSKI: Could you tell 21 that, in fact, had Jethro Tull in their play 22 me what you were physically doing during that 22 lists. And I could choose that radio station Page 223 Page 225 1 and listen. 1 time? 2 2 What I'm saying is I never heard THE WITNESS: During the 72-hour 3 "Aqualung" in the period of time that I 3 period? 4 4 listened. But I did find a number of stations JUDGE WISNIEWSKI: Yes. 5 THE WITNESS: Well, this was -- it 5 that, in fact, had it on its play lists. So 6 6 either they played it at one time in the past wasn't a continuous 72 hours. It wasn't from, 7 or they would play it in the future. 7 you know, 8:00 a.m. on Monday to 8:01 on 8 8 So I was quite successful in Thursday. It was not a period like that. 9 It was -- and I estimated 72 9 finding on AOL, Yahoo! Launchcast, and Live365 10 10 stations that claimed to have Jethro Tull hours. I don't believe I say precisely. 11 "Aqualung" on their play lists. And they were 11 Approximately. But it was a period of time while I was at work working on this testimony. 12 rock stations. They played music that would 12 13 be contemporaneous to the same artists. 13 I had the radio on listening. 14 14 And I, in fact, often got other And, again, that's why I chose Jethro Tull's "Aqualung." I would immediately 15 songs from the same album, "Cross-eyed Mary" 15 and other songs" from the same -- Jethro Tull 16 know it in two or three notes. 16 17 17 "Aqualung" is both a song and the name of an JUDGE WISNIEWSKI: Thank you. 18 THE WITNESS: Sure. 18 album. So I would get other songs on that 19 19 album. So I would find rock stations that CHIEF JUDGE SLEDGE: Mr. Nebel, I 20 7.35 20 appreciate your testimony. And you have were playing other Jethro Tull songs, just not 21 21 covered some difficult areas and explained "Aqualung." 22 So I was very successful finding 22 them well and explained them in a way that we

Page 226 on AOL, Yahoo! Launchcast, and Live365 2 stations who had on their play lists Jethro 3 Tull's "Aqualung." I just never -- could not 4 on demand search for that song and on any of 5 the services immediately find a station for 6 which "Aqualung" was the next song to play and 7 I could make a copy of it using streamripping. 8 The fact is I was frustrated in waiting for 9 that song to play. 10 CHIEF JUDGE SLEDGE: Well, I have 11 to comment that it certainly appears that you 12

have weighted the results by picking a song so low on the charts compared to a group that is very high on the charts.

15 Any other questions?

16 MR. LARSON: I will ask just one 17 follow-up question.

FURTHER REDIRECT EXAMINATION

19 BY MR. LARSON:

> Mr. Nebel, I think there might be just a bit of conflict or confusion with your previous testimony, the searching you just

Page 228

week is gone - in fact, I would argue a song that's in the top 10 this week and gone next week, I'm going to have less likely to go to finding it next week.

So I don't think I biased by searching for a song --

Putting aside the question of bias, I just want to make sure that just so we're clear on the testimony, on AOL and Yahoo!, were you actually able to search at all for Jethro Tull or "Aqualung"?

Well, I could search. When I put in "Jethro Tull Aqualung," I was offered to purchase the album again immediately by both of those services and then offered the rock genre. It knew Jethro Tull "Aqualung" was rock. So it offered the rock stations, yes.

CHIEF JUDGE SLEDGE: All right.

19 Thank you, sir. 20

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(Whereupon, the witness was excused.)

CHIEF JUDGE SLEDGE: Before we

Page 227

talked about.

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Yes. A

In your answer just now, you suggested you could do that sort of searching on AOL and Yahoo! and Live365 in order to find stations playing that sort of artist. Is that, in fact, true or is it just Live365?

Well, no. All of them offer the rock genre, a number of stations in the rock genre. The Judge's contention is that by choosing an old song, I minimize the likelihood of finding it.

And my approach was the opposite. I used a song that I know had -- it's a double platinum album. So there are hundreds of millions of copies out in the world. That's a very popular song. If you go to the rock stations, you will find Jethro Tull playing on many of the rock stations.

So the contention is by not choosing a top 40 pop artist, you know, a song that's in the top 10, say, this week but next

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recess for the day, what is the status on the motion on the week for Thanksgiving?

2 3 MR. STEINTHAL: Your Honor, I 4 think that SoundExchange is looking for the 5

possibility of finding witnesses to testify

6 that week. And the parties are all

7 conferring.

> I feel sort of in the middle of --I just need to advise the tribunal in the U.K. one way or the other. And I'm waiting to hear what they're going to propose as a schedule.

I understand the Board's desire to move things up and get these concluded as soon as possible. And, you know, I'm just a pawn in this back and forth.

16 I'll do what I can and try to 17 structure it so that the witnesses I have to 18 be here for I can be here for. And when they 19 have the broadcasters go on and the smaller 20 webcasters go on, I'll do my bit over in the 21 U.K. and just go back and forth and try to 22 accommodate your schedule, too.

Page 230 CHIEF JUDGE SLEDGE: I realize they are not present, but wouldn't it be 3 logical to fit your schedule if Royalty Logic's witnesses were presented at that time? 5 MR. STEINTHAL: Well, in fact, 6 Your Honor, it may be that they would prefer 7 to do that week of the 20th, but I think it's 8 a question of SoundExchange having available 9 witnesses, too. 10 So let us keep conferring. I 11 mean, we're working on something that would 12 avoid having to adjourn the week of the 20th 13 because of the interest that the Board has 14 articulated. Give us another day to try to do 15 that. And maybe tomorrow morning we'll have a better picture of where we are and all of 16 17 that. 18 But, instead of filing a written 19 motion, while we're trying to address the 20 circumstances without the need to do it, 21 that's what we're going to do. 22 CHIEF JUDGE SLEDGE: Thank you.

Page 232 1 the sort of -- you know, the Monday and 2 Tuesday before Thanksgiving? Is that what 3 your anticipation is? 4 MR. COWIE: Yes. I mean, it does 5 not seem physically possible to be done with 6 the testimony by the 30th, which was Mr. 7 Handzo's understanding that the Board 8 preferred us to be done with the testimony. 9 CHIEF JUDGE SLEDGE: That would be 10 a strong preference, but that may not be 11 possible. And that's why I was focusing on 12 Royalty Logic because, even if we only went Tuesday and Wednesday of that week, it would 13 14 seem like their witnesses would fit in there, 15 we would get that done and then be prepared to move at least, if nothing better, at least be 16 prepared to move into SoundExchange the week 17 18 following Thanksgiving. 19 MR. COWIE: If we did that, Your 20 Honor, we would not be able to finish the

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December.

4 the 15th. In an attempt to finish by --5 CHIEF JUDGE SLEDGE: What? 6 MR. COWIE: Fifteenth of this 7 month. 8 CHIEF JUDGE SLEDGE: Yes. Okav. 9 MR. COWIE: Next Wednesday. 10 CHIEF JUDGE SLEDGE: Next 11 Wednesday. 12 MR. COWIE: In order to finish 13 with all of the testimony this month, we have been contacting our witnesses. And we will 14 15 have to go the Monday, the Tuesday of 16 Thanksgiving just to simply fit them all in by 17 the 30th given the length of time that we anticipate for cross on certain --18 particularly the experts. We anticipate a 19 20 full day for each of the experts to testify. 21 MR. STEINTHAL: Right. But are 22 they scheduled now for the 20th and 21st under

MR. COWIE: Your Honor, just to

give you an update, it's my understanding that

RLI is planning to put its witnesses on around

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JUDGE ROBERTS: So you are saying you need two weeks?

MR COWJE: We need I think six

SoundExchange's case before the 7th of

MR. COWIE: We need, I think, six whole days of testimony. But then we have a problem in that Dr. Brynjolfsson is not available after Thanksgiving until the 5th. He is available beforehand.

MR. STEINTHAL: Let us continue conferring and have this discussion tomorrow morning if you don't mind.

JUDGE ROBERTS: I have one question after Mr. Jaffe tomorrow. If we should not finish Mr. Jaffe, despite efforts at going late, is he available Thursday morning?

MR. STEINTHAL: He is not, but we have no reason to believe that we won't finish tomorrow, even with a shortened day, because based on how long it took the first time and how long we expect the direct to be, we just don't foresee a four-hour cross-examination. And as long as we don't have a four-hour

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1	Page 234 cross-examination, then we'll finish tomorrow.	1	Page 236 fix the exhibit. And SoundExchange has
2	JUDGE WISNIEWSKI: And he is	$\frac{1}{2}$	indicated that they won't have any opposition
1 3	testifying on behalf of three of the parties	3	to us doing so. We have provided them with a
4	tomorrow?	4	-
5	MR. STEINTHAL: Yes, albeit that	5	copy. I wanted to alert you to that.
6	you all know the scope of the testimony in	6	And I have courtesy copies for you if you
7	written form. We don't foresee a direct	7	would like them. We have also filed it
8	that's going to be longer than an hour and a	8	through the normal channels with the office,
	half.	9	but I didn't know if you actually would get
10	CHIEF JUDGE SLEDGE: And you don't	10	copies by Thursday.
11	have to qualify him	11	CHIEF JUDGE SLEDGE: What time of
12	MR. STEINTHAL: Right.	12	
13	· CHIEF JUDGE SLEDGE: like Mr.	13	day was that? MR. LARSON: It was filed, I
1		14	think, this morning, three or four hours ago.
14	Nebel took. It took a half-hour today, not	15	CHIEF JUDGE SLEDGE: We'll
15 16	that long. MR. STEINTHAL: So if the Board	16	
	wants to start a little bit earlier than 9:30	17	probably have it.
17		18	MR. LARSON: Okay. So I'll just
18	tomorrow, I'm sure the parties would be able	1	MD COMME I 11 t-1
19	to do that.	19	MR. COWIE: I will take one.
20	CHIEF JUDGE SLEDGE: It is too	20	MR. STEINTHAL: The testimony
21	late to try to change that.	21	itself isn't changed. It's an exhibit.
22	MR. STEINTHAL: Okay.	22	MR. LARSON: It's a correction to
	Page 235		Page 237
1	CHIEF JUDGE SLEDGE: There are not	1	there were some computational errors in an
2	enough people here to	2	exhibit which is a financial spreadsheet.
3	MR. STEINTHAL: Right.	3	MR. COWIE: It is actually only
4	MR. LARSON: Your Honor, I will go	4	the last page.
5	down tomorrow's schedule. Mr. Isquith won't	_	
	-	5	MR. LARSON: Right. And, just for
6	be coming tomorrow. He was the second witness	5 6	MR. LARSON: Right. And, just for clarity, in the paragraph in the testimony
6 7	-	1	
1 .	be coming tomorrow. He was the second witness	6	clarity, in the paragraph in the testimony
7	be coming tomorrow. He was the second witness scheduled. Given the change and the fact that	6 7	clarity, in the paragraph in the testimony that refers to the exhibit, it required a
7 8	be coming tomorrow. He was the second witness scheduled. Given the change and the fact that he is actually ill, we didn't want to have him	6 7 8	clarity, in the paragraph in the testimony that refers to the exhibit, it required a clarification on the fact that it's final
7 8 9	be coming tomorrow. He was the second witness scheduled. Given the change and the fact that he is actually ill, we didn't want to have him travel if there was little chance of him	6 7 8 9	clarity, in the paragraph in the testimony that refers to the exhibit, it required a clarification on the fact that it's final numbers, as opposed to a tentative sheet that
7 8 9 10	be coming tomorrow. He was the second witness scheduled. Given the change and the fact that he is actually ill, we didn't want to have him travel if there was little chance of him getting in. We will attempt to fit him in.	6 7 8 9 10	clarity, in the paragraph in the testimony that refers to the exhibit, it required a clarification on the fact that it's final numbers, as opposed to a tentative sheet that had been provided before.
7 8 9 10 11	be coming tomorrow. He was the second witness scheduled. Given the change and the fact that he is actually ill, we didn't want to have him travel if there was little chance of him getting in. We will attempt to fit him in. We're hoping maybe next Tuesday, but that is	6 7 8 9 10 11	clarity, in the paragraph in the testimony that refers to the exhibit, it required a clarification on the fact that it's final numbers, as opposed to a tentative sheet that had been provided before. CHIEF JUDGE SLEDGE: Thank you.
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119:4 197:20 accessed 40:14 accommodate 19:10 229:22 accomplish 51:3 accomplishes 74:22 account 80:6,18 114:9 accounted 51:1 AccuRadio 4:19 accurate 172:19 222:8 achieved 10:4 25:19 acoustic 111:9 acquires 30:1 acquiring 102:5 acquisitions 102:2 active 54:16 activity 19:10 70:13,17 224:5 actual 95:21 96:7 actually 19:15 25:6 31:20 35:14 40:17 48:3 74:6 79:13 86:8 108:6 126:2 134:17 136:16 141:2 164:18 176:8 178:1 179:21 188:9 195:9 211:20 214:4 228:10 235:8 236:9 237:3 ad 13:6 26:9 57:14 73:6 73:8 74:15 75:2 76:1 add 53:17 84:8,9 89:14 185:1 added 43:9 addition 70:18 155:20 207:16 additional 9:7 17:1 18:6,16 32:12 84:9 165:4 200:15 address 8:20 27:17 44:19 95:6 97:3 138:1 230:19 addressed 92:7 addresses 45:6 97:22 addressing 49:2 94:9 adjourn 230:12 adjunct 115:4 Adjustment 1:8 administrative 124:13 admitted 167:19 ado 99:6 adopt 80:1 ads 26:5 57:20 58:20 59:16 61:5 68:21 69:1,4,15,16 70:8 72:7 74:13 75:9 76:10 advance 42:4 49:13 advanced 213:21 advertisement 18:14 23:15 32:11 33:11

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155:1,12 advertisers 60:22,22 advertising 10:9 16:20 18:13 19:5,16,22 20:2 21:12,20 22:2 22:20,21 23:18 24:6 26:1,8,17 32:10 53:10 55:4,10,16 56:4,13 57:3,6 59:20 61:9 advise 229:9 Advisory 8:2 ad-supported 27:12 AEC 217:19 AEC-protected 217:19 affect 127:2 affirmatively 99:3 afford 105:12 aforementioned 36:16 58:5 66:9 157:17 165:7,19 167:21 181:18 191:1 201:7 afoul 208:12 after 43:2 49:21 81:19 88:19 91:11 94:4 98:10 196:9 208:3,6 209:6,20 210:13,16 210:21 220:9 233:6 233:12 afternoon 157:11 again 9:21 18:15,22 19:7 21:16 22:9,10 23:6 25:7 27:22 56:19 68:17 74:17 87:17 113:13 124:21 129:17 131:10 132:1 134:7,13 140:18 147:20 155:6 156:19 161:19,22 163:21 164:9,16 165:1 171:13 175:10 192:5 204:2,15 205:7 207:18 215:12 223:14 228:14 age 139:4 aggregate 18:1 20:8 ago 17:19 33:20 56:15 103:10 105:8 195:4 236:14 agree 50:22 69:18 94:2 98:10 169:2 179:17 186:2 193:8 197:2,13 197:17 198:11 199:1 199:7 agreement 69:20 70:15 72:1 agreements 70:19 Ah 112:1

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